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**THE IMPACT OF EARNINGS MANAGEMENT ON ACCOUNTING
CONSERVATISM**

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The Impact of Earnings Management on Accounting Conservatism			
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Abstract			
<p>This study attempts to explore and empirically examine the impact earnings management has on earnings conservatisms. I argue that in the practice of income-decreasing earning management, managers more likely accelerate the recognition of bad news in earnings than good news and it thus actually influences firms' earnings conservatism by biasing the degree of firms' earnings conservatism upwards. While in the practice of income-increasing earnings management, managers more likely speed up the recognition of good news in earnings while defer the recognition of bad news in earnings and it thus actually affects firms' earnings conservatism by biasing the degree of firms' earnings conservatism downwards. I also argue that the firms which engage in income-decreasing earnings management tend to be more conservative than the firms which engage in income-increasing earnings management.</p> <p>In the empirical examination, I use the incremental bad news effect in Basu (1997) earnings regression model to measure the degree of earnings conservatism. Discretionary accruals is used to proxy for earnings management. I partition the full sample into income-decreasing sub sample and income-increasing sub sample according to the sign of firms' discretionary accruals. The results show: (1) In Basu's regression model, the negative discretionary accruals sub sample obtains the higher incremental coefficient on bad news than the full sample, while the negative discretionary accruals sub sample obtains the lower one than the full sample. (2) In the combined regression model, the estimated coefficient, which captures the incremental earnings' response to bad news for the negative discretionary accruals sub sample firms, is significantly positive. The results therefore support my hypotheses.</p>			
Keywords			
conditional conservatism, asymmetric timeliness, discretionary accruals, earnings management			
Additional information			

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1 INTRODUCTION

1.1 Background

Financial reporting, on the one hand, is regarded as a mechanism to convert firms' inside information to the outside financial information users. It improves the efficiency of capital markets through supplying useful financial information to investors who rely on it to make investment decisions. Investors require the firms' managers to provide relevant financial information, which can best reflect firms' current operations and future prospects. On the other hand, financial reporting offers accounting measures, which are related to reported accounting number for managerial performance evaluation purpose. Net income is a typical example of accounting measure. Accounting measures provided by financial statements are normally tied to managers' bonus plan as a stimulus for generating more value for firms' shareholders.

However, there exists the conflict of interests between managers and firms' shareholders (investors) and agency theory attributes it to the separation of firms' ownership and control. In addition, due to the existence of information asymmetry, managers have more private knowledge of firms' financial conditions. This obvious advantage of firms' inside information over shareholders enables managers to hide certain information or to report biased accounting information to investors or other outside information users for various incentives.

Accounting conservatism in financial reporting arises primarily for the purpose to facilitate external parties such as investors, lenders and standard setter to govern or monitor the firm's operations. Firstly, for the purpose to protect investors and other stakeholders' interests since the existence of interest conflict between managers and investors (or lenders). It mitigates the moral hazard and adverse selection problems between managers and investors (or lenders) via avoiding managers biasing earnings upwards and thus mislead investors or lenders' investment or borrowing decisions.

Secondly, shareholders are likely misled by fraud or misstatement in released financial reporting. If fraud or misstatement is detected in financial reporting, firm would be sued by shareholders. Conservatism arises due to this possible shareholders' litigation. Conservatism reduces firms' expected potential litigation cost because understatement of net assets and earnings would generate less litigation risk than overstatement of them (Watts, 1993). Thirdly, income tax as a nexus links financial reporting system to tax system since its calculation is tied to firm's reported earnings. This link between tax system and financial reporting system generates the demand for conservatism. Conservatism benefits firms by reducing the present value of firms' tax liabilities when taxable income is tied to reported income. Finally, conservatism generates due to the regulatory force. Standard setters and regulators tend to be conservative in Financial reporting system because they likely undertake more risk of being blamed and being charged more cost if the firms overstate their net assets value and earnings.

Conservatism refers to firms' "prudent reaction to uncertainty" (FASB, 1980). According to (IASB, 1989), the prudence of economic uncertainty requires the firms not to overstate firms' assets or income and not to understate firms' liability or expenses. The first dimension of accounting conservatism in the literature is unconditional conservatism (ex ante conservatism), which can be understood as the understatement of assets and overstatement of liabilities (e.g Watts and Zimmerman, 1986). The second dimension of accounting conservatism is conditional conservatism (ex post conservatism), which is defined by Basu (1997) as the asymmetric recognition of economic losses versus gains, resulting in earnings reflect 'bad news' faster than 'good news'. Incremental coefficient on bad news in Basu (1997)'s earnings regression model is used to measure the degree of firms' conditional conservatism. Basu's definition of conditional conservatism emphasizes on the understatement of reported earnings and thus is also referred as earnings conservatism. In the empirical part of my thesis, I follow Basu's definition to test sample firms' earnings conservatism.

Given that financial reporting requires managers to make judgments over firms' economic events, for example managers need to make judgments over assets' estimated useful life, bad debt allowance, assets impairment, pension obligation. It thus enables managers to exert their discretions over accruals or change in accounting policies to influence reported earnings. However, the manipulated earnings distort firms' true and underlying economic performance and thus mislead the investors who make investment decision depending on firms' released financial statements.

Managers are motivated to engage in earnings management for three typical incentives. First, stock market sees accounting information such as earnings reported by managers as an indicator for valuing firms' stock price. It thus causes managers' incentives to manage reported earnings so as to affect firms' stock price in the short run. They may be motivated to either manipulate earnings upwards as to increase firms' share price and thus maximize current shareholders' interests, or may influence buyout firms' stock price to go down by understating earnings deliberately in favor of their own benefits. Second, bonus and debt contracts generate earnings management practice. In order to maximize their bonuses, managers are encouraged to manipulate earnings upwards when reported earnings fall between the bogey and cap of their bonus contracts, however, to manipulate earnings downwards either when the earnings fall below the bogey or surpass the cap of their bonus contracts (Healy, 1985). Certain covenants in the debt contracts, such as a constraint on firms' levels of debt to equity ratio, dividend payout and interest coverage ratio etc., may also induce managers to take actions to report upwards-managed earnings as to avoid violating these constraints. Third, managers may manipulate earnings downwards as to mitigate political cost. For example, firms which show high profitability are more likely attract government and media' attention and thus may be imposed special taxes or more strict regulations. In this case, managers may have incentives to report lower earnings.

Managers practice earnings management normally through accruals, change in accounting policy and manipulation of firms' real activities. Among these techniques, accruals is the most desirable and frequently used one by managers than the other two because it is more flexible to exert by managers and is hard to detect by investors or other outside financial information users. As Healy (1985) states, accounting policy changes as an opportunistic earnings management technique is not as preferable to managers as accruals. While manipulation of real activities is seen as the least desirable technique for earning management practices (Fields et al., 2001). However, due to the "iron law" of accrual reversal, current accruals will reverse ultimately in the future accounting period. Earnings management through accruals therefore can only influence firms' short-term reporting accounting numbers.

Based on the discussions of conservatism and earnings management above, I argue that in the practice of income-decreasing earning management, managers are more likely accelerate the recognition of bad news in earnings than good news. This action actually abuses the accounting conservatism principle and the tendency to report lower earnings actually create "an additional undesirable conservatism". Put another way, the income-decreasing earnings management practice actually influences firms' earnings conservatism by biasing the degree of firms' earnings conservatism upwards. In contrast, in the practice of income-increasing earnings management, managers may be motivated to speed up the recognition of good news in earnings while defer the recognition of bad news in earnings or even do not report it. This action actually impairs the accounting conservatism principle and the tendency to report higher earnings actually affects firms' earnings conservatism by biasing the degree of firms' earnings conservatism downwards. I also infer that the firms which engage in income-decreasing earnings management tend to be more conservative than the firms which engage in income-increasing earnings management.

1.2 Prior Related Research

Basu (1997) interprets conditional conservatism as the asymmetric recognition of earnings in losses relative to gains. Based on this interpretation, he predicts that earnings are more timely reflecting publicly available bad news than good news. Using negative stock return to proxy for bad news and positive stock return to proxy for good news, he regresses earnings on stock returns to examine sample firms' earnings conservatism. The empirical result shows that the incremental coefficient on bad news (β_1) is significantly positive, which implies that the response of earnings to return is stronger for bad news than for good news. Conditional conservatism also reflects in the persistence of earnings. It is adopted to timely report transitory dip in the current period while deter to report unrealized gains but spread it over in the future periods. Basu (1997) states that the negative earnings changes are more likely to reverse in the subsequent period than positive earnings changes and positive earnings changes have the tendency to persist in the future accounting periods. Following the study of Basu (1997), many researches work on earnings conservatisms. Ball, et al.(2000) extends Basu's study on earnings timeliness asymmetry to international contexts across different GAAP regimes. They provide empirical evidence that the recognition in bad news is more pronounced in common-law based countries(e.g US) than in code-law based countries (e.g Germany). Pope and Walker (1999) analyze the variation in the earnings recognition between US and UK GAAP regimes and show evidence that the degree of earnings conservatism before extraordinary items under US GAAP is higher than that under UK GAAP, however, the result is vice versa after excluding the extraordinary items in the earnings.

Watts (2003) summarizes four explanations for conservatism's origin. First, debt contracting is regarded as an important explanation for the origin of conservatism. (e.g Watts and Zimmerman, 1986; Watts, 2003). Since managers may act contrary to the interest of lenders, rational lenders would incorporate certain protective

covenants in the debt contracts as to reduce the default risk. Beaver and Ryan (2000) provides empirical evidence that the more severe bondholder-shareholder conflict the firm faces, the more conservative it is. Chen et al. (2007) reports that conservatism benefits both lenders and borrowers because conservatism, on the one hand, cause more timely signals to firms' default risk for lenders, on the other hand, lower the borrowing rates for borrowers. Conservatism also helps reducing the dividend policy conflicts between shareholders and bondholders (Ahmed et al., 2001). Second, Litigation explanation for conservatism can be derived from the evidence of the variations in conservatism across different litigation regimes. Basu (1997) examines the conservatism in the US in four periods and find that the increase of conservatism is consistent with the increase of auditors' litigation exposure over the four periods. Ball et al. (2000) investigates the variation of conservatism across different GAAP regimes in the international context. They find that financial reporting in common-law based countries such as U.S, UK are more conservative than in code-law based countries such as France, Germany. Third, the connection between financial reporting and tax reporting results in conservatism in accounting (Watts, 2003). Shackelford and Shevlin (2001) provide evidence that tax planning affects the choice of accounting methods. The conformity between firms' accounting and taxable income can be regarded as a sign for identifying the degree of conservatism. Kim and Jung (2007) and Heltzer (2009) report that the relation between tax and conservatism is stronger when firms' reported income is more conform to its taxable income. Finally, regulatory considerations can be another explanation for conservatism origin. Regulators and standard-setters (e.g FASB; SEC) tend to set conservatism accounting and reporting standards. SEC (Securities and Exchange Commission) establishes a set of regulations to forbid firms' managers overstating net assets value over its first 30 years (Walker, 1992). Lobo and Zhou (2006) show empirical evidence that the financial reporting conservatism increases after SOX Act and the resultant SEC certification requirement are published.

Empirical researches mainly adopt three measures to assess the conservatism. First,

earning-stock returns relation can be used as a measure for conservatism. after the study of Basu (1997), literatures on conditional conservatism usually use the incremental coefficient on bad news(β_1) in Basu (1997) regression model to measure the degree of firms' conditional conservatism (e.g Ball et al., 2000; Pope and Walker, 1999; Holthausen and Watts, 2001). Second, the sign and magnitude of accruals over time can measure conservatism and negative periodic net accruals over time, as stated by Givoly and Hayn, 2000, is an indication for the degree of conservatism. Third, net asset can be used as a measure for conservatism. Firms' book to market ratio is applied by Beaver and Ryan (2000) to measure conservatism based on the notion that, under conservatism, firms tend to report lower net assets and thus lower book to market ratio. Feltham and Ohlson (1995,1996) develop valuation models which can be applied to measure the degree of understatement of net assets.

Managers are induced to engage in earnings management practice for various incentives. First, managers manipulate reported earnings as to affect firms' stock price in the short run. For one thing, they may manipulate earnings upwards to overstate reported earnings. Teoh, et al. (1998) find that managers intend to manage earnings upwards to increase firms' IPO price and that there is a reversal of unexpected accruals in the post IPO period. In the case of the acquisition financed by stock, the positive unexpected accruals and the subsequent accrual reversal can also be detected. (Erickson and Wang, 1999). For another, managers may manipulate earnings downwards to understate reported earnings. Perry and William (1994) report that there exists negative discretionary accruals before a management buyout, which indicates that managers have the incentives to decrease earnings. Abarbanell and Lehavy (2003) find evidence that firms have the tendency to show negative discretionary accruals when receiving sell recommendation. Second, managers' incentives to manage earnings upwards or downwards are subject to their bonus contracts. As a seminal study of contracting incentives for earnings management, Healy (1985) reports that managers manipulate earnings upwards only when earnings

fall between the bogey and cap of their bonus contracts. However, they are motivated to manipulate earnings downwards either when the earnings fall below the bogey or surpass the cap of their bonus contracts. Dechow and Sloan (1991) investigate whether firms' R&D expense decreases when top managers' (e.g CEOs') tenure is closing, they find that firms' CEOs cut R&D expense in their final year of incumbency as to report higher earnings. Finally, political considerations can explain for the income-decreasing earnings management. Jones (1991) reports that firms show greater negative accruals in the period of import relief investigation than the period without this investigation, in line with it, Cahan (1992) find that firms under anti-trust investigation by US government show more earnings-decreasing abnormal accruals during the investigation years. Key (1997) provides empirical results that the negative unexpected accruals are detected in the firms of the cable television industry when they are in face of government deregulation hearings.

Managers most frequently use accruals as a technique to practice earnings management. Total accruals can be decomposed into non-discretionary component and discretionary component by prior literatures. (e.g Healy, 1985; DeAngelo, 1986; Jones, 1991; Subramanyam, 1996; Xie, 2001). As argued by Scott (2003), discretionary accruals component is especially utilized for earnings management purpose. Discretionary accruals and earnings management are used synonymously in the literature (Kothari, 2001). Prior earnings management literatures use discretionary accruals as a proxy for earnings management (e.g Lara, et al., 2005; Pae, 2007). Beginning with Healy (1985), a variety of methodologies for measuring accruals are developed by researchers. Dechow et al. (1995) review and analyze primary accrual methodologies up to date, including Healy (1985) model, DeAngelo (1986) model, Jones (1991) model, Industry Model and also provide their modified Jones (1991) model. Among these accrual models, Jones (1991) models are widely accepted by researchers and considered as the best existing accruals estimation methodology. Jones (1991) accruals model is a time-series estimation model. Similar to Healy and DeAngelo models, Jones model is a time-series estimation model,

however, it releases the assumption that non-discretionary accruals is constant over the estimation period and thus it estimates the non-discretionary accruals more accurately than the previous models. In Jones model, total accruals is regressed on the variables of firms' fixed assets and changes in firms' sales to get estimated parameters to estimate non-discretionary accruals. And then the discretionary accruals component is assume to be the residuals after deducting the non-discretionary accruals component from the total accruals.

Some earnings management literatures are interested in exploring the relation between earning management and conditional conservatisms and empirically examining whether earning management influence the conditional conservatism. Lara et al. (2005) investigate the variations of earnings management's effect on the measure of earnings conservatism across the different institutional contexts (common law context and code law context). The empirical result shows that discretionary accruals in code-law based countries (Germany and France) has a significant association with bad news, biasing upwards the incremental bad news coefficient (β_1), which is a measure of earnings conservatism in Basu (1997) regression model. The result implies that earnings management, which can be measured by discretionary accruals, actually affects the degree of firms' earnings conservatism in the code-law based countries.

Accruals can be used by managers to implement conservative accounting principle . However, relatively little prior earning management literatures place emphasis on the effect accruals have on conditional conservatism. Pae (2007) examines whether managers' discretion over accruals influence conditional conservatism. He decomposes total accruals into non-discretionary component and discretionary component and tests the impact both accruals components may have on conditional conservatism. Empirical evidence shows that it is the discretionary component, rather than non-discretionary component, that mainly contribute to conditional

conservatism.

Prior literatures reviewed above are all mainstream researches in the fields of conditional conservatism and earnings management. Mainly grounded on these studies, my thesis is intended to further explore the relation between the earnings management and conditional conservatism (earnings conservatism).

1.3 Research Problem and Structure of Thesis

This thesis attempts to explore the relation between the earnings management and conditional conservatism and empirically examine the impact earnings management has on the conditional conservatism. It is conducted as an empirical, quantitative research and can be classified as an association study.

In the empirical part of this study, I use negative discretionary accruals to proxy for income-decreasing earnings management and positive discretionary accruals to proxy for income-increasing earnings management. Jones (1991) accruals model is applied to estimate sample firms' discretionary accruals. The incremental coefficient on bad news (β_1) in Basu (1997) earnings regression model is used to measure the degree of firms' earnings conservatism.

Specifically, I first apply Jones (1991) accruals model to calculate firms' estimated discretionary accruals and then partition the sample firms into two sub-sample according to the sign of firms' discretionary accruals. The firms who get negative discretionary accruals fall into an income-decreasing earning management sub-sample, the firms who get positive discretionary accruals fall into an income-increasing earnings management sub-sample. Next, I run Basu regression model for the full sample firms and the two sub-sample firms respectively. I predict

that in Basu (1997) regression model, the incremental coefficient on bad news (β_1) for income-decreasing sub-sample firms is higher than that of full sample firms and that the incremental coefficient on bad news (β_1) for income-increasing sub-sample firms is lower than that of full sample firms. Put another way, an upwards bias in earnings conservatism is expected to exist in income-decreasing sub-sample firms, while a downwards bias in earnings conservatism is expected to exist in income-increasing sub-sample firms.

To empirically examine whether the firms which engage in income-decreasing earnings management tend to be more conservative than the firms which engage in income-increasing earnings management, I create a dummy variable, S_{it} , which set equal 1 if the sign of discretionary accruals of the sample firms is negative, and set equal 0 otherwise, to differentiate two sub samples. I incorporate S_{it} into Basu (1997) regression model and run the combined regression to obtain the estimated coefficient β_3 , which captures the difference of earnings' response to bad news between the sample firms with negative discretionary accruals and the sample firms with positive discretionary accruals. β_3 is predicted to be positive, which indicates that the income-decreasing sub-sample firms response more strongly to bad news than the income-increasing sub-sample firms do, in other words, income-decreasing sub-sample firms are more conservative than the income-increasing sub-sample firms.

In line with my predictions, empirical results shows: (1) In Basu regression model, the negative discretionary accruals sub sample obtains the higher incremental coefficient on bad news β_1 than the full sample does, while the negative discretionary accruals sub sample obtains the lower incremental coefficient on bad news than the full sample does. (2) In the combined regression model, the estimated coefficient β_3 ,

which captures the incremental earnings' response to bad news for the negative discretionary accruals sub sample firms, is significantly positive.

The remainder of this thesis is organized as follows: Chapter 2 first introduces the concepts of accounting conservatism, particularly addresses conditional conservatism (earnings conservatism) based on the study of Basu (1997), then offers four explanations for the origin of conservatism, and finally presents three typical measures for conservatisms. Chapter 3 explains the concepts and incentives for earnings management, and then discusses techniques and main patterns for earning management, and finally underlines accrual-based earning management. Chapter 4 builds the the link between earnings conservatisms and earnings management and develops two hypotheses of this study. Chapter 5 interprets the research design. Chapter 6 first describes the data and sample selection. And then provides empirical results and the analysis of results. Chapter 7 offers the conclusion and limitation of this thesis.

2 ACCOUNTING CONSERVATISM

2.1 Definition

Financial Accounting Standards Board Statement Concept Statement NO.2 defines accounting conservatism as a "prudent reaction to uncertainty" (FASB. 1980). In the International Accounting Standards Board(IASB) framework, the "prudence" is interpreted as "assets or income are not overstated and liability or expenses are not understated." (IASB, 1989).

Accounting conservatism generally can be manifested in two different dimensions in the literature. First, it is referred as unconditional conservatism (Beaver and Ryan, 2005), also labeled as balance sheet conservatism, ex ante conservatism (Richardson

and Tinaikar, 2004) or news-independent conservatism (Chandra et al., 2004). Unconditional conservatism can be understood as the understatement of assets and overstatement of liabilities (e.g Watts and Zimmerman, 1986). Ball and Shivakumar (2006) refers unconditional conservatism as low earnings and book values independent of economic outcomes. Examples of accounting practices under unconditional conservatism include immediate expensing depreciation of property, plant, and equipment (such as adoption of accelerated depreciation accounting method), adopting conservative inventory valuation policies (such as LIFO inventory valuation in the economic of inflation) and immediate expensing all R&D cost in current earnings.

Second, the accounting conservatism is referred as conditional conservatism (e.g Basu, 1997; Ball et al., 2000), also labeled as income statement conservatism, ex post conservatism (Richardson and Tinaikar, 2004) or news-dependent conservatism (Chandra et al., 2004). Conditional conservatism is traditionally described as "anticipate no profit but anticipate all losses" (e.g Bliss, 1924). Consistent with this interpretation, Basu, (1997) defines conservatism as "the accountant's tendency to require a higher degree of verification to recognize good news as gains than to recognize bad news as losses". In other words, the conservatism is the asymmetry of timeliness in recognition of losses relative to gains in Basu's definition. In the similar way to Basu's definition, Watts (2003) defines conditional conservatism as the differential verifiability required for recognition of profits versus losses. Examples of conditional accounting conservatism include the adoption of the accounting rule of recording assets impairment but not revaluing them upwards, accruing bad debt allowance, writing down account receivable and the asymmetric treatment of contingent losses relative to contingent gains etc.

The adoption of both conditional and unconditional accounting conservatisms achieves several important objectives. First, it protects the interest of investors, claim holders and other stakeholders through capturing the firms' perceived future loss in

the current accounting period. Second, it mitigates firms' litigation and regulatory costs by reducing firms' litigation risk. Third, it reduces firms' present value of tax liabilities when taxable income is tied to reported income. In addition, it enables accounting and industry regulators to set standards based on it to avoid economic instability.

The literature places different emphasis on unconditional conservatism and conditional conservatism. Beaver and Ryan (2005) discusses that the unconditional conservatism gives more focus on valuating on types of economic assets and liabilities and investigating the valuations' effects on future income. Unconditional conservatism results in that book value of equity is expected to be lower than the market value of equity, especially when firms' future cash flow is uncertain. On the other hand, the conditional conservatism endeavors in protecting the shareholders and other stakeholders' interests and thus improving the contracting efficiency, considering that there exist conflicts between the managers and shareholders and managers have incentives to report upward-biased accounting numbers. Basu (2005) points out the critical difference between conditional and unconditional conservatism is that conditional conservatism uses information when it is received in future periods, while unconditional conservatism only uses information which is known at the start of the asset's life.

Several accounting researches put eyes on the relation between the two dimensions of conservatisms, Pope and Walker (2003) and Roychowdhury and Watts (2007) provide empirical evidence that the firm's level of unconditional conservatism, proxied by the market-to-book ratio, has a negative association with the degree of conditional conservatism, proxied by asymmetric timeliness in earnings. Further, Beaver and Ryan (2005) develop a model to capture the distinct natures of and interactions between conditional and unconditional conservatism. The application of the model reveals the fact that unconditional conservatism is determined at the beginning life of assets and liabilities and thus precedes conditional conservatism and

that conditional conservatism affects subsequent unconditional conservatism when it resets the cost bases of net assets. By providing empirical evidence, Gassen et al. (2006) also shows a negative relation between conditional and unconditional conditional conservatism in his study.

2.2 Conditional Conservatism

" Conservatism in the balance sheet is of dubious value if attained at the expense of conservatism in the income statement, which is far more significant." (CAP,1939). This statement in financial accounting underlines the importance of placing our emphasis on income statement with regard to accounting conservatism. That is conditional conservatism.

Basu (1997) interprets conditional conservatism as the asymmetric timeliness in recognition of economic losses versus economic gains, which results in that earning more timely reflect publicly available "bad news" than "good news". Basu uses negative stock return to proxy for "bad news" and positive stock return to proxy for "good news".

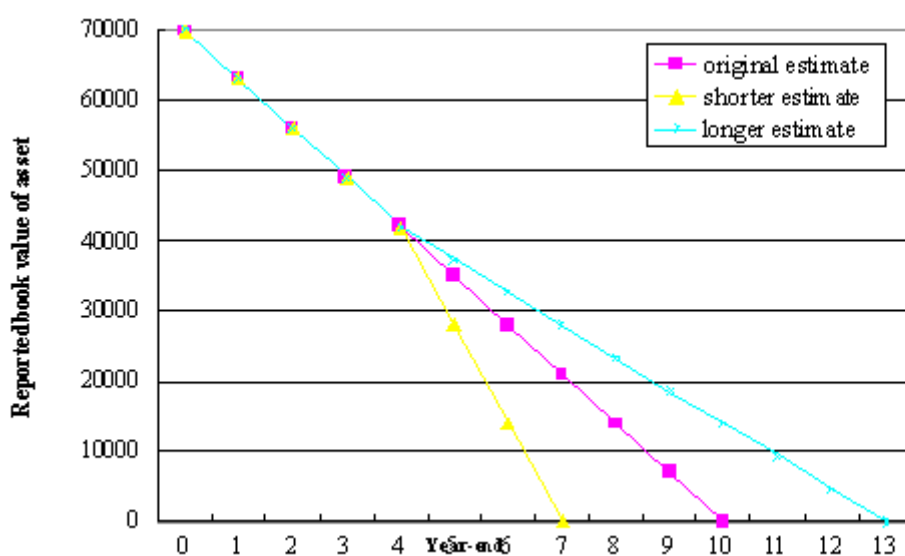


Figure 1. Example of book value of a fixed asset under conservative accounting when estimates of remaining useful life change (Basu, 1997)

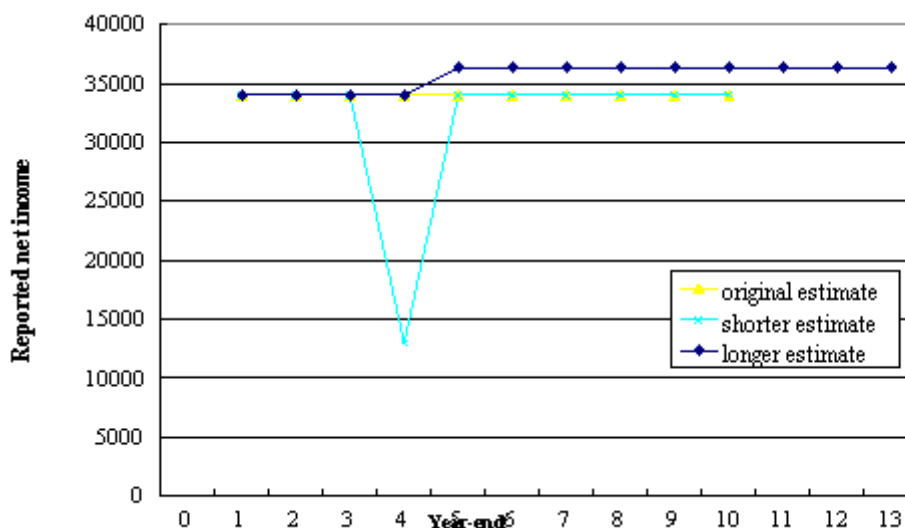


Figure 2. Example of reported net income under conservative accounting when estimates of remaining useful life of a fixed asset change (Basu, 1997)

Figure 1 and Figure 2 display the example Basu (1997) gives to illustrate the effect conditional conservatism has on balance sheet and income statement. Figure 1 illustrates the effect the news has on the book value of firms' fixed asset. Assume that the original purchased value of a fixed asset is \$70,000 with an estimated useful life of ten years and straight-line depreciation method is applied to this fixed asset. Figure 2 illustrates the effect the news has on the net income of firm. The firm is assumed to have \$41,000 net income before the depreciation charge each year of the fixed assets' life.

Consider a firm receiving news that changes its estimate of the productive life of a fixed asset (Basu, 1997). If a firm receives a bad news at the end of fourth year of asset's life which results in the asset useful life is expected to reduce by, say three years, then an asset impairment would be recorded immediately in the concurrent

earnings under conservative accounting principle. It therefore leads to the sharp fall down of the concurrent earnings, however, the it would not affect the firm's reported earnings in the subsequent accounting periods. While, If good news is received and the asset useful life is expected to increase by three years, the firm would reduce the depreciation charge in earnings gradually over the new longer estimated asset's useful life and the cumulative gain due to the less depreciation charge would persist over the future accounting periods, rather be recorded in the concurrent accounting period. This example reveals that, under conservative accounting, earnings response more strongly to bad news than to good news and the bad news effect on earnings has more power to reverse in the future period while good news effect on earnings is more persistent.

Figure 3 displays the relation between the earnings and stock returns. The slope coefficient for negative returns is higher than for positive returns, which exactly illustrates Basu's interpretation of conservatism.

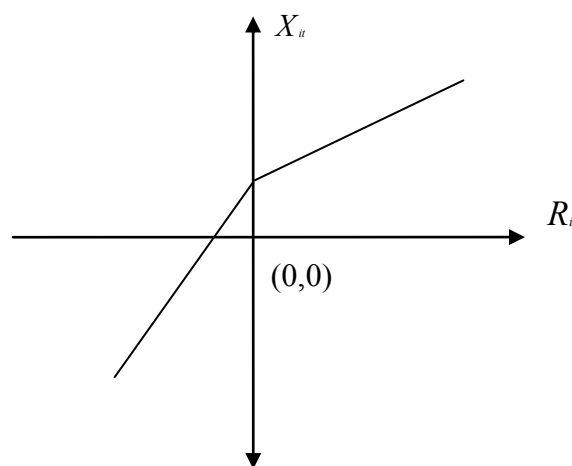


Figure 3. Asymmetry in earnings recognition under conditional conservatism (Basu, 1997)

Basu (1997) examines firms' accounting conservatisms in the regression model below and shows that the response of earnings to negative returns is stronger than to positive returns.

$$X_{it} / P_{it-1} = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 DR_{it} * R_{it} \quad (1)$$

Where i and t denote the firm and year respectively. X is the annual earnings, P is the stock price at the end of the previous fiscal year, R is the contemporaneous annual returns. DR is a dummy variable, which set equals 1 if R is negative and set equals 0 otherwise. Coefficient β_1 captures the incremental bad news effect on earnings and thus shows the degree of firms' conservatism. Positive β_1 indicates that earnings is more sensitive in bad news than good news, which thus implies a conservative accounting.

Giving insights into the effect accruals have on accounting conservatism, Basu (1997) also analyzes and examines the conservatism which reflects in the differential timeliness of earnings over cash flow in bad news period versus in good news period. Earnings is composed of cash flow component and accruals components. Since accruals enable accountant to recognize unrealized losses immediately in the current earning whereas not recognize unrealized gains in current earnings under conservative accounting. The asymmetry in timeliness of earning over cash flow is therefore stronger for bad news than for good news, put another words, earning is more conservative than cash flow.

Additionally, earnings conservatisms, which are applied to quickly report transitory dip in the current period while deter to report unrealized gains in current period but spread it over in the future periods, also reflects in the persistence of earning. It implies that the negative earnings change more likely to reverse in the following period than positive earnings changes and positive earnings changes has the tendency to persist in the future accounting periods.

Following the study of Basu (1997), many accounting researchers work on earnings conservatisms. Regarding the study of earning conservatism in the

international context, Ball et al.(2000) extends Basu's study on earning timeliness asymmetry to international contexts with different GAAP regimes. They find empirical evidence that the recognition in bad news is more pronounced in common-law based countries(e,g US) than in code-law based countries (e,g Germany) and the recognition in bad news in UK firms is as half sensitive as in US firms. They attribute these earning timeliness asymmetry variations across the countries to the legal and institutional reasons. Pope and Walker (1999) analyze the variation in the earnings recognition between US and UK GAAP regimes and provide evidence that the degree of earnings conservatism before extraordinary items under US GAAP is higher than that under UK GAAP, however, the result is vice versus after excluding the extraordinary items in the earnings.

In my thesis, consistent with the definition of conditional conservatism in Basu (1997), I interpret conservatism as the asymmetric earnings timeliness in the recognition of bad news relative to good news. And I use the incremental coefficient for bad news (β_1) in Basu (1997) regression model to measure the degree of conditional conservatisms.

2.3 Explanations for Conservatism Origin

Watts (2003) summarizes four explanations for conservatism. First, conservatism mitigate the moral hazard and adverse selection problem between contracting parties. Second, conservatism reduces the expected cost of litigation because overstatement of net assets and earning increase litigation risk and thus more likely result in higher litigation cost than understatement of net assets and earnings. Third, conservatism reduces the present value of tax liabilities when taxable income is influenced by reported income. Finally, conservatism benefit regulator setters such as the SEC and the FASB by reducing political costs due to the overstatement of net assets and

earnings.

2.3.1 Contracting Explanation

Firms can be regarded as a joint of various contracts, of which contracts between firms and managers(employment contracts), between firms and its lenders(lending contracts or debt contracts) are two typical and important ones. Agency theory points out there exists the conflict between the contracting parties.

Information asymmetry is defined as that some parties to business transactions may have an information advantage over others (Scott, 2003, 7). In financial accounting, there are two typical types of information asymmetry which are adverse selection and moral hazard. Adverse selection arises when managers exploit their information advantage of the firms at the expense of outside stakeholders, such as lenders and investors. Moral hazard arises when the separation of ownership and control of the firms results in the difficulty for shareholders and creditors to observe the managers' effort or performance. Since managers often have the private knowledge of the firm's operations and due to the existence of information asymmetry, once their compensations are linked to the their performances, which usually measured by reported earnings, they have incentives and possibilities to bias the accounting number to avoid any adverse effect that will reduce their compensation. Under this circumstance, conservatism is endowed an ex ante efficient role between contracting parties.

Regarding the employment contracts, due to the existence of information asymmetry, managers often have the private knowledge of the firm's operations and thus can exploit their information advantage of the firms over the outsiders. Once their compensations are linked to the their performances, which usually measured by reported earnings, they have incentives and possibilities to bias the accounting

number to avoid any adverse effect that will reduce their compensation. In this case, conservatism is required by owners (investors) to avoid managers' incentive to bias earnings upwards and mislead their investment decisions.

With regard to the debt contract, as early as Gilman (1939), he explains that accounting conservatism originates partly from the demand in debt markets. Positive accounting theory also suggests that conservatism plays an important role in contracting efficiency and regards debt contracting as one important explanation for the origin of conservatism. (e.g Watts and Zimmerman, 1986; Watts, 2003). Moral hazard problem arises between debtholders and firm's managers just as it does between the owners and managers. Since managers may act contrary to the interest of lenders. Due to their information disadvantage, rational lenders will incorporate certain protective covenants in the debt contracts in order to bind the firm's financial condition to a constant threshold. For example, they may set a limitation for the firms' dividend payout or require firm not to exceed a certain debt to equity ratio etc. Conservatism requires managers to report losses in earnings more quickly than gains. It thus facilitate the lenders to identify more timely the potential increase in default risk, which may be caused by either external business shocks or firms' opportunistic behaviors.

Conservatism can benefit both lenders and borrowers in a debt contract. Lenders and other creditors demand more timely information about 'bad news' because the option value of their claims is more sensitive to a decline than an increase in firm value (Smith, 1979). Once covenants are violated by firms, lenders can benefit from it through, for example, increasing borrowing rate. On the other hand, from the borrowers' perspective, they have the incentives to commit not to violate lenders' interest and thereby reduce cost of debt or avoid paying higher cost rate. Chen et al. (2007) first directly empirically examine the benefit the conservatism brings to both lenders and borrowers in a debt contract. He find that conservatism benefit both lenders and borrowers because conservatism contributes to more timely signals of

firms' default risk for lenders and the lower borrowing rates for borrowers.

Several academic research papers explore the relation between the conservatism and debt contracting. Beaver and Ryan (2000) provides empirical evidence to support that the more severe bondholder-shareholder conflict the firm faces, the more conservative it is. They document that conservatism increase the borrowers' interest by decreasing the cost of debt and that more conservative the borrowers is, the lower borrowing rates they receive. Ball et al. (2005) documents that conditional conservatism, which is defined as asymmetric timeliness in recognition of losses, can improve debt contracting efficiency. He attributes it to the reason that conservatism accelerates debt covenant violations so that the decision rights are transferred to lenders more quickly. Ahmed et al. (2001) states that conservatisms play a role in reducing the dividend policy conflicts between shareholders and bondholders.

2.3.2 Litigation Explanation

Due to the existence of information asymmetry and interest conflicts, as discussed in last subsection, shareholders are likely misled by the accounting numbers reported by managers. Shareholders litigation arises when fraud or misstatement is found in reported financial statements and firm's managers, directors or auditor is sued by shareholders. As the increasing shareholders' lawsuit in 1960s, shareholders litigation has been seen as another important explanation for the conservatism. "Overstating net assets is more likely to generate litigation costs than understating net assets. Conservatism, by understating net assets, reduces the firm's expected litigation costs." (Watts, 1993).

Since the understatement of net asset by applying conservatism in accounting can decline the firms' litigation risk and thus mitigate firms' litigation costs, firms' managers and auditors therefore have the incentives to report lower earnings and

value of net asset.

Litigation explanation for conservatism can derive from the evidence of the variations in conservatism across different litigation regimes. Watts (1993) predicts that accounting conservatism in US firms increases with the increasing litigation risk in US legal environment. Basu (1997) tests the conservatism in the US in four periods and find that the increase of conservatism is consistent with the increase of auditors' litigation exposure over the four periods. This significant positive relationship between auditors' legal liability exposure and accounting conservatism suggests that more litigation risk generates more conservatism. Ball et al. (2000) investigates the variation of conservatism across different GAAP regimes in the international context. They find that financial reporting in common-law based countries, such as United State, Australia and Canada and United Kingdom, are significantly more conservative than in code-law based countries such as France, Germany and Japan. While among the common-law based sample countries, United Kingdom shows the least accounting conservatism. These significant variations in conservatism across litigate regimes are in line with the legal and regulation explanations for conservatism.

2.3.3 Tax Explanation

Income tax as a nexus links financial reporting system to tax system since its calculation is tied to firm's reported earnings. This link between tax system and financial reporting system provides incentives for managers to employ conservative accounting methods in financial reporting to report lower income in the high tax-rate accounting period and shift the earnings to low tax-rate accounting period as to reduce the tax payment. So to speak, as tax rates increase, the reported earning becomes more conservative. Watts(2003) suggests that the connection between financial and tax reporting results in conservatism in accounting since the more

timely earnings recognition of losses than gains enable managers to delay reporting unrealized revenue but recognize anticipated losses timely as to reduce present value of tax payment.

Through applying conservatism accounting principle, manager can make appropriate tax planning as to reduce tax cost. Tax system influences the choice of accounting methods can trace back to 1909 in US. Shackelford and Shevlin (2001) provide evidence that tax planning affects the choice of accounting methods. Watts (2003) also mentions some examples of financial accounting method which are affected by tax system. For example, firms may apply LIFO accounting method to inventory valuation so as to record more product cost in current income statement.

The conformity between firms' accounting and taxable income can be seen as a sign for identifying the degree of conservatism. Watts (2003) argues that the stronger the association between financial and tax reporting is, the more conservative the firm is. Consistent with it, Kim and Jung (2007) and Heltzer (2009) report the empirical results that the relation between tax and conservatism is stronger when firms' reported income is more conform to its taxable income.

In addition, the adoption of different measures for conservatism influences the empirical result of study on the relation between conservatism and firms' tax payment. Kim and Jung (2007) find a positive relation between conservatism and taxes using unconditional conservatism measure, while no such relation is found using conditional conservatism measures. The result indicates that the choice of conservatism measure affects the the study on tax-induce conservatism.

2.3.4 Regulation Explanation

Regulatory force contributes to the conservatism. Standard setters and regulators are prone to conservatism in Financial reporting system because they likely undertake more risk of being blamed and being charged more cost if the firms overstate their net assets value and earnings. Watts (1977) argues that losses resulted from overstated assets and incomes are more likely detected in the political process than gains. This induces regulators and standard-setters to tend to be conservative. Through setting conservatism accounting and reporting standards, standard setters and regulators (e.g FASB; SEC) can reduce the risk and the regulation cost imposed on them.

The government regulation of financial reporting can be traced back to the establishment of the Securities Acts in 1930s. Securities Acts originates from the lesson of the collapse of NYSE stock in 1929 and thus adhere its rationale to conservatism as to be against the overvaluation of firms' stock. SEC (Securities and Exchange Commission) formulates a set of regulations to forbid firms' managers overstating net assets value (Walker, 1992) over its first 30 years. They both exert regulatory effect on conservatism.

Lobo and Zhou (2006) investigate the changes in managerial discretion on conservatism after Sarbanes-Oxley Act and find that lower discretionary accruals are reported in the post-period and that losses are recognized more timely than gains in the post-SOX period. These findings both suggest that the financial reporting conservatism increases after SOX Act and the resultant SEC certification requirement are published. Thus, SOX can be seen as another potential source for the regulatory explanation for the conservatism.

2.4 Conservatism Measures

Watts (2003) points out three typical measures which are applied by empirical research to assess the conservatism. These measures are used to examine the time-series and cross-sectional variations in conservatism and thus help researchers generate discriminations for these variations among alternative conservatism explanations: contracting, litigation, taxation and accounting regulation which are discussed in the last subsection.

First, earnings and accruals are used as measures for conservatism. Earnings is the sum of operating cash flows component and accruals component. The difference between earnings and operating cash flows is therefore due to the accrual adjustment. Therefore, earnings conservatism can be reflected on the sign and magnitude of accruals. In other words, the sign and magnitude of accruals over time can measure conservatism and negative periodic net accruals over time are normally used as measures for conservatism. " Consistent predominance of negative accruals across firms over a long period is, *ceteris paribus*, an indication of conservatism, while the rate of accumulation of negative accruals is an indication of the shift in the degree of conservatism over time" (Givoly and Hayn, 2000).

As discussed in previous subsection, Basu (1997) regresses earning changes on annual return and provides empirical result supporting his prediction that negative earnings changes have more tendency to reverse in the future period than positive earnings changes. It implies that gains tend to be more persistent than losses under conservatism principle. The persistence of earnings can also be used as measures for conservatism. The more persistent earning is, the more conservatism it is. While this asymmetric treatment of gains relative to losses is achieved through accruals which is applied by accountant to spread the unrealized gains over the future periods while to accrue fully anticipated losses immediately in current period. This conservatism results in the consequence that accruals are tend to be negative and accumulated accruals are tend to be underestimated.

Second, earning-stock returns relation can be used as a measure for conservatism. Basu (1997), Ball et al. (2000) and Holthausen and Watts (2001) regresses abnormal return, which captures the stock market's response to earning news, on earnings changes, which proxy for earning news. They provide consistent empirical result that in the regression model, the higher slope coefficient β_1 and adjusted R^2 are detected in the sample surprised by positive earnings changes than in the sample surprised by negative earnings changes. It implies that stock market return responses to positive earnings changes more sensitively than negative earnings changes because it considers the positive changes are more persistent than the negative earnings changes and thus will capitalize more value on one dollar change of the former than of the latter.

Third, net asset can be used as a measure for conservatism, which is mainly applied by the researchers focusing on unconditional conservatism (balance sheet conservatism). Under unconditional conservatism, negative changes in asset value are recognized while positive change in asset value is not. It thus results in the understatement of net asset value compared to its market value. Prior literatures employ book to market ratio measure and valuation model measure for unconditional conservatism. Beaver and Ryan (2000) use firms' book to market ratios to measure conservatism based on the notion that, under conservatism, firms report lower net assets and thus lower book to market ratios. Feltham and Ohlson (1995,1996) develop valuation models which are usually applied to assess the extent of understatement of net assets.

3 EARNINGS MANAGEMENT

3.1 Definition

From the standard setters point of view, earning management can be defined as

follows:

" Earning management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stake holders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting number" (Healy and Wahlen, 1998).

This definition displays two perspectives from which we can view earning management. On the one hand, from a financial reporting perspective, managers may manipulate earnings and report the distorted accounting figures to the public information users, such as investors, creditors etc. One important role financial accounting plays is to facilitate managers to convert the firm's inside information to the outsider users. However, the manipulated earnings distort firms' true and underlying economic performance and thus mislead the investors who make investment decision depending on firms' released financial statements. On the other hand, from a contracting perspective, to benefit managers themselves at the expense of other contracting parties, managers may opportunistically use earning management as a vehicle to show better accounting number, to which their compensations tied.

Additionally, the definition also puts forward the way managers can exert the earnings management. That is through "judgment in financial reporting", which is reflected in managers' choice of different accounting policies. For example, managers may accrue less bad debt provision, choose FIFO accounting method for inventory valuation in deflation period, or choose straight-line rather than accelerating assets depreciation accounting method for recording less depreciation in income statement as to report higher profit. As stated by Scotts (2003,369), "Earning management is the choice by manager of accounting policies so as to achieve some specific objectives"

It is necessary to make a distinction between earning management and financial fraud. Even there is no a clear and fixed definition for earning management in academic or regulation field, as an extreme circumstance of earning management, financial fraud is well defined as follows:

" The intentional, deliberate misstatement or omission of material facts, or accounting data, which is misleading and when considered with all the information made available, would cause the reader to change or alter his or her judgment or decision" (National Association of Fraud Certified examiner, 1993, 12)

Dechow and Skinner (2000) point out that according to SEC's discussion of earning management and fraud, if financial reporting choices violate GAAP, then it constitutes both of them, while if financial reporting choices are made within the bound of GAAP, then it only constitutes earnings management rather fraud. It means earnings management is allowed and legal as long as the financial choices do not violate GAAP. However, this distinction between earnings management and financial fraud raises a question of what if the former will cause adverse consequence of the firms as the financial fraud would do even the accounting choices or judgments made by managers fall within GAAP.

Another question people may wonder, is that earnings management on earth good or bad? Should it exist? Since the reliability of the financial statement information is reduced to some extent due to the existence of earning management, people may argue that why it still exists? From the cost-effective point of view, Schipper (1989) argue that the it is costly for practitioners and regulators to find out the evidence of earnings management, given that the "trick" earnings management play is difficult to detect (e.g use discretionary accruals as a technique), or is hard to understand for outside information users (e,g use the changes of accounting policies as a technique).

Regardless of cost consideration, should earnings management persist? What is the good side and bad side of it?

The answer to the question above relies on how earnings management is used. For the good side of earnings management, it can be used as a medium to transfer the manager's inside information to the market to improve the relevance of financial accounting information so that the firms' underlying future performance can be better reflected and thus investors can make better prediction and investment decision relying on these information. On the other hand, from contracting efficiency perspective, it is preferable to enable managers to manage earnings to some extent, so as to confront with incomplete and rigid contracts. For the bad side of earnings management, first, to maximize their bonus, managers tend to practice earnings management to affect accounting reporting numbers. The released financial information may mislead the investors and impair their interests. Second, managers have the tendency to manipulate earnings to influence firms' share price. For example, managers are encouraged to manage earnings upwards so as to raise the firm's share price when issuing new share. It benefits the current shareholders however impairs the interest of the new shareholders. More explicit discussion about the incentives for earnings management is given in the following section.

3.2 Incentives for Earnings Management

Three primary incentives are discussed in this section. As Healy and Wahlen (1998) state, the first two incentives, the capital market incentive and contracting incentives are related to firms' reported accounting figures and the third one, political incentive is relevant to political process which influences firms' operating environment.

3.2.1 Capital Market Incentives

Accounting information such as net income reported by managers serves investors for valuing firms' stock price. Clarkson et al. (1992) provides empirical evidence that market responds significantly to earnings forecasts as an indicator of firms' value. It thus causes managers' incentives to manage reported earnings so as to affect firms' stock price in the short run. However, this influence will reverse in the future accounting period due to the iron law of accrual reversal.

On the one hand, there exist the incentives for managers to manage earnings upwards or report overstated earnings. Prior literature provides several empirical findings which imply managers' incentives to overstate earnings. Dye (1988) shows that a manager has the motivation and ability to manipulate earnings to increase the stock price and thus benefit the current shareholders. In the case of IPO (initial public offering), given no established stock price can be referred to and information such as reported earnings can be helpful in signaling firms' value to investors. (Hughes, 1986). It is possible that managers of firms going public exercise earnings management as to receive a better offering price. Teoh, et al.(1998) find that managers intend to manage earnings upwards to increase firms' IPO price and that there is a reversal of unexpected accruals in the post IPO period. In addition, they also provide evidence that managers report positive unexpected accrual, which is an indicator of earning increasing management, before seasoned equity offering. In the case of the acquisition financed by stock, the positive unexpected accruals and the subsequent accrual reversal can also be detected. (Erickson and Wang, 1999). In addition, meeting analysts' stock price expectations can be another motivation for managers to report overstated earnings (Burgstahler and Eames, 1998). For example, Firms which receive financial analysts' buy recommendation are more likely to have positive discretionary accruals, which indicate managers' incentives to manage earnings upwards through exerting discretions over accruals. (Abarbanell and Lehavy, 2003)

On the other hand, managers may have incentives to manage earnings downwards or report understated earnings. Managers of buyout firms are motivated to understate earnings. Intuitively, it is understandable because managers can benefit themselves to influence buyout firms' stock price to go down by understating earnings. Perry and William (1994) examine the discretionary accruals in buyout firms and find a negative discretionary accruals before a management buyout, which indicates that managers have the incentives to decrease earnings. When receiving sell recommendation, firms tend to show negative discretionary accruals (Abarbanell and Lehavy, 2003). Additionally, Bushee (1998) provides evidence that firms are encouraged not to reduce reporting research and development expense in the income statement to avoid a decrease in the reported net income when the firms have a high percentage of institutional ownership. It indicates that firms with a high percentage of ownership by institutions do not care about reporting higher earnings by cutting off R&D expense.

Since the managers have the incentives to manage earnings for capital market purpose, then does the stock market response efficiently to the earnings management? Subramanyam (1996) tests accruals and provides evidence that stock market responds positively to discretionary accruals. It is consistent with that earnings management can be used to reveal managers' inside information about firms' future earnings performance and market will respond efficiently to the discretionary accruals. However, this interpretation is challenged by Xie (2001). Xie (2001) decomposes the accruals into non-discretionary component and discretionary component and argues that if the market is efficient, then a lower ERC should be assigned to the latter than the former, given the persistence of the latter is lower than that of the former. However, the empirical result reveals that market overvalues the discretionary accruals as a result.

3.2.2 Contracting Incentives

In this subsection, I will discuss two primary contractual incentives, which are bonus contracts incentives and debt contracts incentives for earnings management.

As a seminal study of contracting incentives for earnings management, Healy (1985) extends the bonus plan hypothesis of positive accounting theory, and predicts that managers with bonus scheme are more likely to maximize current earnings by shifting earnings from future periods as to benefit themselves under their bonus scheme of firms. However, his study is limited to the firms whose bonus plan is tied to the current earnings only. After Healy's paper, numerous studies investigate the bonus contracts to detect managers' incentives of earnings management. As Healy and Wahlen (1999) states, on average, the evidences of these studies support that managers make accounting adjustments as to maximize their bonuses which are tied to reported earnings.

Managers' incentives to manage earnings upwards or downwards are subject to their bonus plans. They will choose specific accounting policies to manipulate earnings upwards only when the earnings is between the bogey and cap of their bonus contracts. However, they are motivated to manipulate earnings downward either when the earnings fall below the bogey or surpass the cap of their bonus contracts (Healy, 1985). It is easy to interpret the reason that intuitively managers bonuses will increase in proportion to the increase in reported earnings and thus they are encouraged to maximize the reported earnings. However, when the earnings fall below the bogey, managers are motivated to decrease reported earnings even further, which is usually called "take a bath", to "reserve" earnings for the subsequent accounting periods and thus increase the possibility to receive the bonuses in the subsequent periods. For example, writing-off more bad debts in the "below bogey" period will reduce the bad debt provision and thus increase earnings in the following periods. Similarly, when the earnings surpass the cap, managers would do exactly the

same as when earnings fall below the bogey in order to avoid "wasting" the surplus of earnings and to defer the surplus to the future accounting periods.

Additionally, researchers also examine the effect of implicit bonus contracts on managers' incentives to manage earnings. They attempt to investigate whether earnings management increases when top managers' (e.g. CEOs') tenure is closing or when they face the job security problems. As reported by Dechow and Sloan (1991), CEOs cut the R&D expense in their final year of incumbency as to report higher earnings.

Regarding debt contracts incentives, positive accounting theory hypothesizes that managers are more likely to increase current earnings via earnings management when firms are close to the violation of debt covenants. This hypothesis is based on the grounds that increased reported earnings would reduce firms' default risk. Certain covenants are tied to when debt contracts are established, such as a constraint on firms' levels of debt to equity ratio, dividend payout and interest coverage ratio etc. To avoid violating these constraints, managers may take actions to increase current earnings.

Many studies investigate the debt contracts incentives for earnings management (e.g. Healy and Palepu, 1990; DeAngelo et al., 1994; Holthausen, 1981). They all examine the dividend constraint's effect on managers' incentives to manage earnings through exercising accruals or changing accounting policies. However, little evidence can be found to support that managers manipulate earnings as to avoid cutting their dividend pay out when the potential violation of dividend arises.

Other than dividend constraint in the debt contracts incentive, Sweeney (1994) reports that covenants with regard to maintain a certain level of working capital and shareholders' equity are more frequently violated by firms in comparison to that of debt to equity ratio and interest coverage ratio. She studies a sample of firms which

actually violate a debt contract and finds that more earnings increasing accounting policies changes are made in these firms than the control sample firms in the periods prior to the defaulting year. However, she also reports that only less than half of her defaulting sample firms made the accounting policies changes, which raises the problem of the generality in the debt contracts incentives hypothesis for earnings management. DeFond and Jiambalvo (1994) provide evidence that sample firms increase earnings one year prior to the year of covenant violation. These evidences above lead to a mixed viewpoint with regard to the debt contracts incentives for earnings management.

3.2.3 Political Incentives

Political incentives for earnings management are grounded on the political cost hypothesis of positive accounting theory (PAT). It hypothesizes that managers are more likely to change accounting policies or procedure as to lower current reported earnings and defer it to the future period when firms are in face of political cost.

Political cost may arise in the case of firms which earn high profitability and therefore attract more attentions from public media and government. It may cause politicians' action to raise new special taxation or add other more strict regulations on these highly profitable firms and thus offset the excess profit firms earned. Additionally, in the case of firms which are of large size or in the monopolistic industry such as oil or power industry, they are often politically exposed since their business activities influence large amount of people. For example, they may be imposed more environmental responsibilities if they show higher profitability. Finally, in the case of firms which are involved in anti-trust investigation, such firms may seek for the political process to be granted import protection or government subsidiary.

All the cases illustrated above generate managers' incentives to manipulate reported earnings downwards as to either reduce political cost or benefit firms from political process. For example, in order to avoid special taxation charge, managers of oil company may exercise discretions to change accounting method of inventories valuation to show lower profit. Several studies examine whether political considerations contribute to earnings management. Jones (1991) report that firms show greater negative accruals in the period of import relief investigation than the period without this investigation, which indicates managers' incentive to report lower earnings through exercising discretions on earnings-decreasing accruals in the face of import relief investigation. Consistent with it, Cahan (1992) find that firms under anti-trust investigation by US government show more earnings-decreasing abnormal accruals during the investigation years. Key (1997) reports empirical results that the negative unexpected accruals are detected, which implies an earnings-decreasing earning management, in the firms of the cable television industry when they are in face of government deregulation hearings. As Healy and Wahlen (1999) stated, in conclusion, these literatures strongly suggests that political considerations contribute to the incentives for earnings management.

3.3 Techniques and Main Patterns for Earnings Management

As I discussed in the last section, since various incentives induce managers to manipulate earnings, then the question of how managers practice earning managements arises. In this section, I will introduce three techniques and four main patterns for earnings management practices.

3.3.1 Three Techniques for Earnings Management

Prior literatures summarize three main ways for practicing earnings management.

First, exercising discretion over accruals, which is more frequently adopted way than the other two, can be seen as a device for earnings management. Accruals may arise when accounting judgments over firms' economic events by managers are required, for example managers need to make judgments over assets' estimated useful life, bad debt allowance, assets impairment, pension obligation etc. (Healy, 1985).

Accruals are decomposed into non-discretionary accruals (expected or normal accruals) or discretionary accrual (unexpected or abnormal accruals) by the prior literatures. Basically, non-discretionary accruals record the firms' real business activities and thus are reasonable and appropriate, while discretionary accruals are attributable to managers' discretions. As argued by Scott (2003), discretionary accruals component is especially utilized for earnings management purpose since it is more flexible to exercise by managers and hard to detect by investors and other outside financial information users. The disadvantage of using accruals as a vehicle for earnings management is blame for the "iron law" of accrual reversal. Since the current accruals will reverse ultimately in the future accounting period, accruals are more used to influence firms' short-term reporting accounting numbers. More detailed discussions about accruals and accruals methodologies to detect earnings management will be given in section 3.4.

Accounting policies changes, on the other hand, can serve as a vehicle for long-run earning management purpose. It can be used to generate an effect on firms' reporting accounting numbers over a long accounting period. First, accounting policies change may arise when the firm decides to change the way it records its ordinary business. The change of firms' Revenue recognition polices is an example for accounting policies change. Second, accounting policies change may arise when choices among various accounting methods have to be made by managers. For instance, managers need to choose an accounting method for assets' depreciation calculation between the straight-line and accelerated depreciation method, or to choose among FIFO or LIFO or average weighted accounting methods for the inventory valuation.

Given that firms have some flexibilities to choose a certain accounting method within certain accounting standards (e.g GAAP) and also can voluntarily switch it to another one , it creates the possibility for managers to take advantage of it to manage earnings for their own purposes. For bonus purpose, to increase their future bonuses, managers might be encouraged to change accounting policies as to increase future reported earnings. It is consistent with bonus plan hypothesis of positive accounting theory (PAT). Healy (1985) reports that the sample firms which modify their bonus plans actually make more accounting policies changes. It supports that managers actually practice earnings management through changing accounting policies. However, the accounting policies change is not found to be used by managers to influence individual annual reported earnings in Healy's sample firms. He thus suggests that, as a technique, accounting policy change is not as effective and flexible as accruals and that accounting policy change is not suitable to be used for earnings management in short term as accruals does, while it is more desirable to be adopted by managers for long-run earnings management purpose.

Finally, manipulating firms' real transactions can be a practice for managers to reach specific target. In the paper of Roychowdhury (2006), real transactions earnings manipulation is interpreted as managers' actions which diverge from firms' ordinary business activities for the purpose of achieving certain earnings target .

Prior literatures investigate mainly three real activities manipulation methods. The first one is cutting R&D expenditure, which is frequently used by managers as to report higher earnings. Dechow and Sloan (1991) provide evidence that firms' CEOs cut R&D expenditure in the period close to the end of their tenure as to uplift short-run earnings. Consistent with that, Bushee (1998) also offer evidence that firms reduce R&D spending to achieve earnings target. The second one is boosting sales temporarily by offering price discounts to customers to increase short-term earnings. The third one is overproducing products to record more overhead into inventory in

the balance sheet and thus report lower cost of goods sold in the income statement. Roychowdhury (2006) tests all the three manipulation methods above and provide the evidence that managers actually manipulate real activities through these methods to avoid reporting losses.

However, there exist bad sides for the firms if managers practice earnings management through manipulating real activities. Researchers argue that the manipulations of real activities for the short-term earnings reporting purpose sacrifice the future value of the firm because manipulations undertaken to increase current earnings will lead to less good or bad performance of firms' future cash flows. For instance, offering intensive price discounts to customers can boost sales volumes in the short term, while it may rise the difficulty for firms to raise price again in the future period and thus reduce firms' future cash inflow from sales activities. Overproducing products generate both excess inventories and more costs related to hold inventory for the firms.

Bruns and Merchant (1990) and Graham et al. (2005) survey firms' financial executives and find that these executives prefer to manipulate earnings via real activities rather than accruals. Roychowdhury (2006) offers two possible reasons to that. On the one hand, auditors and regulators may tend to maintain more prudence over accruals than firms' real business activities, such as undertaking. Executives therefore may choose to manipulate earnings upwards through undertaking sales promotion or producing more products. On the other hand, firms can not only depend on manipulating accruals to achieve financial targets and thus manipulating real activities offers another choice for managers.

Nevertheless, manipulation of real activities is seen as the least desirable technique for earning management practices (Fields et al. 2001). As Healy (1985) notes that controlling accruals and changing accounting policies are two main approaches applied by managers to manage earnings.

3.3.2 Patterns of Earnings Management

As we discussed in previous section, managers have various incentives to manipulate earnings. Here we analyze four main patterns for earnings management based on Scott (2003, 383) and offer some related findings from Healy (1985).

Scott (2003) identifies four patterns of earnings management. Firstly, so called "take a bath" may arise in the cases of, for instance, when firms are in face of corporate reorganizations, including the change of CEO, or when firms experience a severe economic depression period. To take a bath means that managers intend to record very large losses at one time into one accounting period to "clear the table" through accruals vehicle. For example, managers may write off large amounts of bad debts or obsoleted inventories at one time. By recording big losses in the current period, managers can save earnings for the future accounting periods. Healy (1985) states that managers may choose to take a bath when earnings of firms fall below bogey because it will increase their expected future bonuses.

Secondly, the pattern of income minimization often is adopted by managers when, for example, firms are exposed to political issues. As we discussed in the previous section, political considerations can result in managers' incentives for earnings management. In particular, firms of large size or with high prosperity or in the monopolistic industry are motivated to minimize their net income by adopting some accounting policies, for example using accelerating depreciation method rather than straight line method, or expensing R&D rather than capitalizing it, or choosing LIFO for inventory valuation in the inflation period. By doing so, firms can either reduce their political cost or benefit from political process.

Thirdly, the pattern of income maximization usually serves managers for their bonus

purpose or for the incentive to avoid violating covenants. Managers may be encouraged to maximize the current reported earnings when the earnings fall between the range of bogey and cap of their bonus scheme. On the other hand, to reduce the risk of violating covenants, managers are also motivated to maximize the current reported earnings.

The final pattern is income smoothing. Income smoothing means to average earnings over accounting periods as to reduce earnings' volatility. From financial reporting perspective, income smoothing can play a role of transmitting firms' inside information to outside information users, such as investors as to communicate the predicted persistency of firms' reported earnings to them. From the performance measurement perspective, income smoothing can increase managers' job security given that it enables managers to avoid reporting too low earnings in bad years. We can infer from Healy (1985) that managers have motivations to smooth earnings and maintain it within the range of bogey and cap to avoid lost of their bonuses. In addition, to reduce the possibility of violating covenants in debt contracts or to attempt to reduce borrowing cost by showing lenders a persistent earnings power, manager are encouraged to alleviate the volatility of earnings through income smoothing.

3.4 Accrual-Based Earnings Management

As we discussed in the last section, accruals and accounting policies changes are two primary vehicles applied by managers for earnings management purpose. While the former one is more desirable and frequently used by managers than the latter. As Healy (1985) states, accounting policy changes as an opportunistic earnings management technique is not as preferable to managers as accruals. In other words, accruals is a more effective and pervasive technique than accounting policies changes for earnings management practice.

3.4.1 Accruals and Earnings Management

As Sloan (1996) interprets, the earnings can be decomposed into operating cash flow component and accrual component. Accruals thus can be defined as the difference between earnings reported in income statement and cash flow from operations reported in the cash flow statement (Penman, 2004,123). Net accruals is composed of depreciation and amortization expenses and net changes in non-cash working capital such as account receivable and payable, inventory, bad debt allowance, etc.

Total accruals can be further decomposed into non-discretionary accruals and discretionary accruals by prior literatures. (e,g Healy, 1985; DeAngelo, 1986; Jones, 1991; Subramanyam, 1996; Xie, 2001). Accruals that managers do not have flexibility and can not exert discretions to influence the amounts, at least in the short term, are regarded as non-discretionary accruals. Depreciation and Amortization expense is a typical example of non-discretionary accruals. In contrast, accruals that managers have some flexibilities and can exert certain discretions to influence the amounts fall into the category of discretionary accruals. The accounting items, such as account receivables, accounts payables, inventory, provision for bad debt and warranty allowance are examples for discretionary accruals.

Managers often practice earnings management through accruals vehicle to influence reported earnings in the short term. Through accruals, managers can shift earnings from future accounting period to current accounting period or to defer earnings from current period to future period. However, due to the iron law of accrual reversal, the current earnings-increasing accruals will reverse ultimately and therefore reduce the earnings in the subsequent accounting period. In contrast, the earnings-decreasing accruals will increase firms' future earnings when it reverses. Thus, if managers have the incentives to manage earnings upwards and attempt to maintain it, then they have

to create more positive accruals in the subsequent period, otherwise the earnings will decline as the reversal of accruals in the following period. However, since managers can not postpone the reversal day of accruals in an everlasting way, accruals therefore are more used to influence firms' short-term reporting accounting numbers.

It would be more difficult for investors, auditors and regulators to detect accrual-based earnings management. Managers have sufficient discretions to manipulate earnings within the rules of Accounting standards (e.g GAAP) while investors or regulators can not easily identify it. Schipper (1989) argues that it is even difficult for the board of directors to detect the earnings management which is exercised through accruals. For example, if a firm increases its account receivables, it is hard to distinguish whether this increase is caused only by a normal increase in firms' business volumes or by managers' discretions to accrue more receivables purposely at the end of the year, via for instance, a more generous credit policy to keep the book open at the end of the year. The former case pertains to non-discretionary accruals, while the latter one pertains to discretionary accruals.

3.4.2 Accruals Methodologies to Detect Earnings Management

Methodological problem arises in the earnings management studies, that is how to measure earnings management. "Discretionary accruals and earnings management are used synonymously in the literature." (Kothari et al., 2001). Prior earnings management literatures use discretionary accruals as a proxy for earnings management (e.g Lara, et al. 2005, Pae 2007). Beginnings with Healy (1985), a variety of methodologies for measuring accruals are developed by researchers. I will give a review of five commonly used accrual models in the literature in this sub-section.

The general process of measuring discretionary accruals starts from total accruals, and

then non-discretionary accruals component is estimated by applying a certain estimation model. Finally, the discretionary accruals component is assumed to be the residual after deducting the non-discretionary accruals component from the total accruals. (Dechow et al., 1995).

Healy (1985) investigates a contracting incentive for earnings management. Based on bonus plan hypothesis, he predicts that managers may have incentives to opportunistically manage earnings as to benefit themselves the most under their bonus plan. He proposes an estimation model, which uses the mean total accruals over the estimation period as an estimation for non-discretionary accruals with the assumption that no earnings management is expected over the estimation period, However, as an time-series estimation model, the assumptions raise measurement errors. Equation (2) presents the Healy model:

$$NACC_{\tau} = \frac{\sum^t TACC_t / A_{t-1}}{T} \quad (2)$$

Where t denotes for years in the estimated period and τ denotes for years in the event period; $TACC$ is total accruals; $NACC$ is estimated non-discretionary accruals; A is total assets at the end of the previous fiscal year.

DeAngelo (1986) proposes an estimation model for examining earnings management. In her estimation model, last period's total accruals is used to proxy for the non-discretionary accruals under the assumption that no earnings management is expected in the last period. Equation (3) presents DeAngelo model:

$$NACC_t = TACC_{t-1} \quad (3)$$

DeAngelo's Model can be seen as a special case of Healy's Model. As Dechow et al.

(1995) states, "if nondiscretionary accruals are constant over time and discretionary accruals have a mean of zero in the estimation period, then both the Healy and DeAngelo Models will measure nondiscretionary accruals without errors."

Jones (1991) develops a more refined estimation model to estimate non-discretionary accruals. Similar to Healy and DeAngelo models, Jones model is a time-series estimation model, however, it releases the assumption that non-discretionary accruals is constant over the estimation period and thus it estimates the non-discretionary accruals more accurately than the previous models. Thus Jones models are widely accepted by researchers and considered as the best existing accruals estimation methodology. Equation (4) presents the Jones Model:

$$TACC_{it} / A_{it-1} = \alpha_i + \beta_{1i}(\Delta REV_{it} / A_{it-1}) + \beta_{2i}(PPE_{it} / A_{it-1}) + \varepsilon_{it} \quad (4)$$

Where i and t denote the firm and year respectively; $TACC$ is the total accruals; A is total assets at the end of the previous fiscal year ; ΔREV is changes in revenues and is used to control for non-discretionary accruals of changes in working capital, given that these changes rely on changes in firms' business activities measured by revenue; PPE is gross property, plant and equipment and is used to control for the non-discretionary accruals of depreciation and amortization expenses, given that it relies on firms' fixed assets; ε is the residual that captures all effects on $TACC$ other than those from ΔREV and PPE ; α_i , β_{1i} , β_{2i} are firm-specific parameters which are to be estimated from the regression model.

The estimated parameters α_i , β_{1i} , β_{2i} are derived from the regression model presented by Equation (4). Thus discretionary accruals are estimated as Equation (5) presents:

$$DACC_{it} / A_{t-1} = TACC_{it} / A_{t-1} - (\alpha_i + \beta_{1i} \Delta REV_{it} / A_{t-1} + \beta_{2i} PPE_{it} / A_{t-1}) \quad (5)$$

Where $DACC$ represents discretionary accruals.

Dechow et al. (1995) further provide a modified Jones Model with the attempt to eliminate the measurement errors which result from the discretions exerted on revenues. They release the implicit assumption that revenues are non-discretionary in Jones model. Equation (6) presents the modified Jones Model:

$$TACC_{it} / A_{it-1} = \alpha_i + \beta_{1i} (\Delta REV_{it} / A_{it-1} - \Delta REC_{it} / A_{it-1}) + \beta_{2i} (PPE_{it} / A_{it-1}) + \varepsilon_{it} \quad (6)$$

Where i and t denote the firm and year respectively; ΔREC is the net receivables for firm i in year t less in year $t-1$.

As Dechow et al. (1995) states, the only difference between the modified model and the original one is that the modified model makes an adjustment of changes in receivables ΔREC to the variable ΔREV in the event period. In other words, the modified model assumes that the changes in receivables (ΔREC) in the event period are attributable to the earnings management. They base the assumption on the grounds that it is easier to manage earnings through sales in credit than sales in cash in the recognition of revenues.

The final estimated model, provided by Dechow and Sloan (1991) is the Industry Model. With the assumption that non-discretionary accruals are similar across the firms in the same industry, this model regresses the non-discretionary accruals on the median value of total accruals of the firms in the same industry to estimate the firm's specific parameters in the estimation period. Equation (7) presents the Industry Model:

$$NACC_t = \gamma_1 + \gamma_2 \frac{MEDIAN_I(TACC_t)}{A_{t-1}} \quad (7)$$

Where $MEDIAN_I(TACC)$ represents the median value of total accruals for all non-sample firms in the same industry; A is total assets at the end of the previous fiscal year; γ_1, γ_2 are firm-specific estimated parameters.

In the empirical part of my thesis, I follow Jones model to estimate discretionary accruals, which serves as a proxy for earnings management. I will provide further description of this methodology in research design part of my thesis.

4 HYPOTHESES DEVELOPMENT

4.1 Conditional Accounting Conservatism and Earnings Management

As I discussed in section 3.2, capital market incentive, contracting incentive and political incentive are main incentives for earnings management. These incentives may lead either to managers' income-decreasing earning management practices or to managers' income-increasing earnings management practices. Then the question is whether and how the two forms of earnings management practices influence firms' earnings conservatism.

On the one hand, managers engage in income-decreasing earnings management considering there exist two main incentives. First, bonus contracts induce managers to manipulate earnings downwards when the earnings fall below the bogey or above the cap of the bonus contracts. Second, when firms are in face of political cost, managers are motivated to manipulate earnings downwards and defer it to the future accounting period to either reduce political cost or benefit firms from political process. As to reduce reported earnings, managers therefore are more likely to

accelerate the recognition of bad news in earnings than good news through exerting discretions over accruals or accounting policies changes. Considering the effect of this earnings management practice on firms' earnings conservatism, this action actually abuses the accounting conservatism principle and the tendency to report lower earnings actually create "an additional undesirable conservatism". Put another way, the income-decreasing earnings management practice actually influences firms' earnings conservatism by biasing the degree of firms' earnings conservatism upwards.

On the other hand, managers engage in income-increasing earnings management due to two main incentives. First, bonus contracts motivate managers to report higher earnings when the earnings fall between the bogey and cap of their bonus schemes. Second, debt contracts motivate managers to report higher current earnings when firms are close to the violation of debt covenants. To maximize their bonuses or to avoid violating debt covenants and thus reduce firms' default risk, managers may speed up the recognition of gains (good news) in earnings while defer the recognition of losses (bad news) in earnings or even do not report losses through exerting discretion over accruals or accounting policies changes. Considering the impact of this earnings management practice has on firms' earnings conservatism, this action actually impairs the accounting conservatism principle and the tendency to report higher earnings actually affects firms' earnings conservatism by biasing the degree of firms' earnings conservatism downwards.

Hanna (2002) suggests the earnings management explanation for earnings conservatisms. He argues that Basu (1997)'s findings about earnings conservatisms can be explained by earnings management and he point out that "big baths" and "cookie jar reserves" can be used by managers to manipulate current reported earnings downwards as to increase reported earnings in the future period. This income-decreasing earnings management would increase their future compensations which are tied to reported earnings, or increase firms' stock price by misleading

investors.

Lara, et al. (2005) investigate the variations of earnings management's effect on the measure of earnings conservatism across the different institutional contexts (common law context and code law context). Consistent with Basu (1997), they define the earnings conservatism as the asymmetric timeliness in recognition of bad news relative to good news and examine earnings conservatisms of common-law based countries (UK) and code-law based countries (France and Germany) basing on Basu (1997)'s regression model. The empirical result shows that discretionary accruals in code-law based countries has a significant association with bad news, biasing upwards the incremental bad news coefficient (β_1), which is a measure of earnings conservatism in Basu (1997) regression model. After controlling the discretionary accruals, then the sensitivity of earnings responses to bad news decreases significantly. The result implies that earnings management, which can be measured by discretionary accruals, actually affects the degree of firms' earnings conservatism in the code-law based countries. Lara, et al.(2005) attribute the result to the reason that managers of the code-law based countries have incentives to manipulate earnings downwards and offer explanations for this income-decreasing earnings management practice. Their argument that managers have incentives to manage earnings downwards in the code-law based countries also explains why the evidences of prior literatures show little variations in the degree of earnings conservatism across different legal regimes (code-law and common-law).

4.2 Earnings Management Impacts Conditional Conservatism through Accruals

As we discussed in 3.4.1, the earnings can be decomposed into operating cash flow component and accruals component. Thus if accounting is conservative, conservatisms must be reflected in both cash flow component and accruals

adjustment. As Basu (1997) states, accruals enable the asymmetric timeliness of recognizing unrealized losses relative to unrealized gains. Since unrealized losses influence current reported earnings but do not influence current cash flow, while unrealized gains do not influence both of them, it can be inferred that earnings is more conservative than cash flow. Basu's statement implies that accruals can be used by managers to implement accounting conservatism. However, relatively little prior earning management literatures place emphasis on the effect accruals have on conditional conservatism. (Pae, 2007).

Pae (2007) examines whether managers' discretion over accrual influence conditional conservatism. He decomposes total accruals into non-discretionary component and discretionary component and tests the impact both accrual components have on conditional conservatism. Empirical evidence shows that it is the discretionary component that mainly contributes to conditional conservatism.

In conclusion, in my thesis, I attempt to explore and empirically examine the impact earnings management has on earnings conservatisms. I use negative discretionary accruals to proxy for income-decreasing earnings management and positive discretionary accruals to proxy for income-increasing earnings management. The incremental bad news effect in Basu (1997) earnings regression model is used to measure the degree of firms' earnings conservatism. I predict that in Basu (1997) regression model, the incremental coefficient on bad news (β_1) for income-decreasing sub-sample firms is higher than that of full sample firms and that the incremental coefficient on bad news for income-increasing sub-sample firms is lower than that of full sample firms. I therefore hypothesize:

H1: Income-decreasing earnings management biases the degree of earnings conservatism upwards.

H2: Income-increasing earnings management biases the degree of earnings conservatism downwards.

In addition, I argue that the firms which engage in income-decreasing earnings management tend to be more conservative than the firms which engage in income-increasing earnings management. To examine whether the degree of earnings conservatism is significantly different between the income-decreasing sub sample firms and income-increasing sub sample firms, I incorporate a dummy variable, S_{it} , which differentiate two sub samples, into Basu (1997) regression model to form a new combined regression model (more detailed interpretation about the combined regression model will be given in next chapter). In the combined regression model, coefficient β_3 captures the incremental earnings' response to bad news for negative discretionary accruals sub sample firms. β_3 is predicted to be positive, which indicates that the degree of earnings conservatism is greater for the income-decreasing sub sample firms than for the income-increasing sub sample firms.

5 RESEARCH DESIGN

5.1 Measure of Earnings Management

Following prior earnings management literature (e.g. Lara et al., 2005, Pae, 2007). I use discretionary accruals to proxy for earnings management. The discretionary accruals is estimated through Jones (1991) accruals model.

Following Dechow et al. (1995), I compute total accruals as the sum of depreciations and net change in working capital, scaled by average total assets. The mathematic

equation is presented as follows:

$$TACC_t / A_{t-1} = [(\Delta CA_t - \Delta Cash_t) - (\Delta CL_t - \Delta STD_t - \Delta TP_t) - Dep_t] / A_{t-1} \quad (8)$$

Where t denotes the year. $TACC$ represents the total accruals; ΔCA is the change in current assets; $\Delta Cash$ is the change in cash and cash equivalents; ΔCL is the change in current liabilities; ΔSTD is the change in debt included in current liabilities; ΔTP is the change in income taxes payable; Dep is depreciation and amortization expense; A is the total assets at the end of the previous fiscal year.

Total accruals can be decomposed into non-discretionary accruals ($NACC$) and discretionary accruals ($DACC$). Discretionary accruals is therefore the residual after subtracting non-discretionary accruals from total accruals. Equation (9) presents the mathematic relation among $TACC$, $NACC$ and $DACC$.

$$DACC = TACC - NACC \quad (9)$$

Specifically, I calculate sample firms' discretionary accruals following two steps. First, I apply Jones (1991) accrual model to total accruals. Equation (4) in 3.4.2 has presented Jones Model:

$$TACC_{it} / A_{it-1} = \alpha_i + \beta_{1i} (\Delta REV_{it} / A_{it-1}) + \beta_{2i} (PPE_{it} / A_{it-1}) + \varepsilon_{it} \quad (4)$$

Where i and t denote the firm and year respectively; $TACC$ is the total accruals; A is total assets at the end of the previous fiscal year; ΔREV is changes in revenues and is used to control for non-discretionary accruals of changes in working capital, given that these changes rely on changes in firms' business activities measured by revenue; PPE is gross property, plant and equipment and is used to control for the non-discretionary accruals of depreciation and amortization expenses, given that it

relies on firms' fixed assets; ε is the residual that captures all effects on $TACC$ other than those from ΔREV and PPE ; α_i , β_{1i} , β_{2i} are firm-specific parameters which are to be estimated from the regression model.

Second, I use the estimated parameters, α_i , β_{1i} , β_{2i} , which are derived from the Equation (4) to estimate the non-discretionary accruals component of total accruals. The discretionary accruals component is therefore the residual from subtracting the non-discretionary accruals from total accruals. Equation (5) in 3.4.2 has presented how discretionary accruals is calculated:

$$DACC_{it} / A_{t-1} = TACC_{it} / A_{t-1} - (\alpha_i + \beta_{1i} \Delta REV_{it} / A_{t-1} + \beta_{2i} PPE_{it} / A_{t-1}) \quad (5)$$

According to the sign of firms' discretionary accruals, I partition the full sample firms into two sub-samples. Firms which get negative discretionary accruals is categorized into income-decreasing earnings management sub-sample and firms which get positive discretionary accruals fall into income-increasing earnings management sub-sample.

5.2 Measure of Earnings Conservatism

Following Basu (1997), I interpret earnings conservatism as more timely earnings recognition in bad news than in good news. The incremental coefficient on bad news, β_1 , in Basu (1997) regression model is used to measure the degree of sample firms' earnings conservatism. Using unexpected negative stock return to proxy for bad news and unexpected positive stock return to proxy for good news, I regress sample firms' annual earnings, deflated by beginning-of-period stock price, on current annual stock returns to examine sample firms' earnings conservatisms.

Equation (1) in 2.2 has presented Basu's regression model:

$$X_{it} / P_{it-1} = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 DR_{it} * R_{it} \quad (1)$$

Where i and t denote the firm and year respectively. X is the earnings per share, P is the price per share at the end of the previous fiscal year, R is stock return, DR_{it} is an indicator variable, which take the value 1 if R is negative and take the value 0 otherwise. Slope coefficient β_1 captures the incremental bad news effect on earnings and indicates the degree of earnings conservatism in the regression model.

To test my hypotheses, I first run the Basu (1997) regression model on the full sample firms and then re-run it on each sub-samples respectively. I compare the degree of earnings conservatism of each sub-sample firms with that of full sample firms respectively. The incremental coefficient on bad news (β_1) for income-decreasing sub-sample firms is predicted to be positive and higher than that of full sample firms, which implies that there exists an upwards bias in earnings conservatism in income-decreasing sub-sample firms. While the incremental coefficient on bad news (β_1) for income-increasing sub-sample firms is predicted to be positive and lower than that of full sample firms, which implies that there exists a downwards bias in earnings conservatism in income-increasing sub-sample firms.

Second, to examine whether the degree of earnings conservatism is significantly different between the income-decreasing sub sample firms and income-increasing sub sample firms, I create a dummy variable, S_{it} , which is set equal 1 if the sign of discretionary accruals of the sample firm is negative, set equal 0 otherwise. I incorporate S_{it} into Basu (1997) regression model and run the combined regression model as Equation (10) presents:

$$X_{it} / P_{it-1} = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 DR_{it} * R_{it} + \alpha_2 S_{it} + \alpha_3 DR_{it} * S_{it} + \beta_2 R_{it} * S_{it} + \beta_3 DR_{it} * R_{it} * S_{it} \quad (10)$$

Coefficient β_3 captures the difference of earnings' response to bad news between the sample firms with negative discretionary accruals and the sample firms with positive discretionary accruals. β_3 is predicted to be positive, which indicates that the income-decreasing sub-sample firms response more strongly to bad news than the income-increasing sub-sample firms do. Coefficient β_2 captures the difference of earnings' response to good news between the sample firms with negative discretionary accruals and the sample firms with positive discretionary accruals. It is predicted to be negative, which indicates that the income-decreasing sub-sample firms response less sensitively to good news than the income-increasing sub-sample firms do.

6 EMPIRICAL RESULT

6.1 Sample Selection, Data, and Descriptive Statistics

The sample includes all firms listing on the NYSE, AMEX and NASDAQ stock markets over the period 1950-2010. Financial statement data, stock return data and firms' market values data are obtained from the CRSP US Stock Databases. The following data items for firm i , year t are required in my empirical analysis: stock return(R), earnings(X), change in sales(ΔREV), property, plant and equipment(PPE), change in current assets(ΔCA), change in cash and cash equivalents($\Delta Cash$), change in current liabilities(ΔCL), change in debt included in current liabilities(ΔSTD), change in income tax payable(ΔTP) minus depreciation and amortization expense(DEP). The original sample includes 176,362 firm-year

observations. I first delete the observations missing the data items I require and then I eliminate the top and bottom percentile from each tail of variables' distributions. The final sample consists a total of 150,323 firm-year observations. the descriptive statistics of key variables are presented in Table 1, of which Panel A presents the result for the full sample and panel B presents the result for two sub-samples: negative discretionary accruals sub-sample which consists of 71,037 observations and positive discretionary accruals sub-sample which consists of 79,286 observations.

Table 1 Descriptive statistics of key variables

Panel A: full sample-150,323 observations					
Variable	Mean	Median	Std Dev	Minimum	Maximum
R	0.125	0.055	0.553	-0.857	3.082
X	0.018	0.057	0.209	-1.605	0.563
NACC	-0.031	-0.031	0.033	-0.177	0.109
DACC	0.000	0.004	0.083	-0.498	0.422

Panel B: Negative discretionary accruals versus Positive discretionary accruals				
Variable	Negative DACC(71,037 observations)		Positive DACC(79,286 observations)	
	Mean	Median	Mean	Median
R	0.134	0.054	0.117	0.055
X	-0.017	0.044	0.050	0.066
NACC	-0.030	-0.031	-0.033	-0.032
DACC	-0.063	-0.043	0.056	0.040

Notes: R is stock return; earnings(X) is scaled by stock price at the end of the previous fiscal year. Discretionary accruals (DACC) and non-discretionary accruals (NDACC), scaled by total assets at the end of the previous fiscal year, are estimated by Jones (1991) accrual model. (how they are estimated has been discussed in section 5.1 and estimation results refer to Table 2).

We can see from panel A, for the full sample, consistent with prior earnings management literature, the mean of discretionary accruals in our full sample is close to zero. The standard deviation of earnings (0.209) is smaller than stock return (0.553), which is in line with the argument that earnings is a function of past and present stock return (Ball et al., 2000). Panel B reveals that, for negative

discretionary accruals sub sample, the mean discretionary accruals is -0.063 and the mean earnings is -0.017, which is also negative. On the other hand, the mean discretionary accruals for positive discretionary accruals sub sample is 0.056 and the mean earnings for this sub sample is 0.050, which is also positive.

6.2 Result Analysis

Table 2 reports the estimation results of annual cross-sectional regressions of Jones (1991) model for the full sample (150,323 firm-year observations) over the period 1950-2010. The coefficient estimates on change in sales (ΔREV) is 0.101 and The coefficient estimates on for property, plant and equipment (PPE) is -0.050. Both coefficients estimated parameters are significant at the level of 0.01. Consistent with prior studies, both coefficient estimates show the expected signs: the coefficient estimate on change in sales is significantly positive and the coefficient estimate for PPE is significantly negative. The adjusted R^2 is 0.135.

Table 2 Jones (1991) estimation results

Model: $TACC_{it} / A_{it-1} = \alpha_i + \beta_{1i}(\Delta REV_{it} / A_{it-1}) + \beta_{2i}(PPE_{it} / A_{it-1}) + \varepsilon_{it}$	
Definition: $TACC_t / A_{t-1} = [(\Delta CA_t - \Delta Cash_t) - (\Delta CL_t - \Delta STD_t - \Delta TP_t) - Dep_t] / A_{t-1}$	
Intercept	-0.015*** (-34.29)
$\Delta REV_{it} / A_{it-1}$	0.101*** (123.11)
PPE_{it} / A_{it-1}	-0.050*** (-83.76)
Adj R-Sq	0.135

Notes: $\Delta REV_{it} / A_{it-1}$ is the change in sales, scaled by total assets at the end of the previous fiscal year, PPE_{it} / A_{it-1} is property, plant and equipment, scaled by total assets at the end of the previous fiscal year.

***indicates statistical significance at the 1% level (two tailed)

The main results of this study are presented in Table 3 and Table 4. Table 3 presents the regression results for Basu regression model. Of Table 3, Panel A reports the regression results of earnings on stock returns for the full sample, Panel B and Panel C report the regression results of earnings on stock returns for the negative discretionary accruals sub-sample and positive discretionary accruals sub-sample respectively. First, we can see from Table 3 that, β_0 and β_1 are both significantly positive at 0.01 level for the full sample and also for the two sub samples, the results are in line with prior studies. The degree of earnings conservatism is captured by the slope coefficient β_1 , which measures the incremental bad news effect on earnings. Consistent with Basu (1997), the β_1 s are 0.280, 0.315 and 0.197, significant at the 0.01 level, for the full sample, negative discretionary accruals sub sample and positive discretionary accruals sub sample respectively.

When we compare the β_1 for each sub samples with that for full sample, we obtain that the β_1 for negative discretionary accruals sub sample is higher by 12.5%(12.5%=[(0.315-0.280)/0.280]) than that for full sample, while the β_1 for positive discretionary accruals sub sample is lower by around one third (29.64%=[0.197-0.280]/0.280) than that for the full sample. The results are in line with my predictions that the incremental coefficient on bad news (β_1) for income-decreasing sub-sample firms is higher than that for full sample firms and that the incremental coefficient on bad news for income-increasing sub-sample firms is lower than that for full sample firms. The results also imply that earnings is recognized more timely in bad news for the negative discretionary sample firms, while less timely for the positive discretionary sample firms.

Table 3 Results from Basu (1997) regression model

Basu model: $X_{it}/P_{it-1} = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 DR_{it} * R_{it}$

Panel A: Full sample-150,323 observations

α_0	α_1	β_0	β_1	Adj R^2
0.063*** (65.15)	-0.014*** (-8.8)	0.004*** (3.16)	0.280*** (74.15)	0.101

Panel B: Negative discretionary accruals sub-sample-71,037 observations

0.041*** (24.5)	-0.027*** (-9.4)	0.005*** (2.01)	0.315*** (51.07)	0.112
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Panel C: Positive discretionary accruals sub-sample-79,286 observations

0.079*** (77.03)	-0.011*** (-6.31)	0.011*** (6.89)	0.197*** (45.99)	0.086
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Note: X_{it} is the annual earnings for firm i in fiscal year t, P_{it-1} is the stock price for firm i at the end of the previous fiscal year and R_{it} is the contemporaneous annual return on firm i. DR_{it} is a dummy variable, which set equals 1 if R_{it} is negative and set equals 0 otherwise.

***indicates statistical significance at the 1% level (two tailed)

Second, β_0 measures the earnings response to stock return in good news period. β_0 s are 0.004, 0.005 and 0.011, significant at the 0.01 level, for the full sample, negative discretionary accruals sub sample and positive discretionary accruals sub sample respectively. We note that β_0 for the positive discretionary accruals sub sample is the highest among all cases. It implies that the earnings response to good news approximately three times ($2.75=0.011/0.004$) as much strongly for the income-increasing sub sample firms than for the full sample firms. The result could be explained by that the managers use positive discretionary accruals to conform the earnings and stock returns in good news period. (Guay et al, 1996; Lara et al., 2005)

In addition, the adjusted R^2 s for the full sample, negative discretionary accruals sub

sample and positive discretionary accruals sub sample are 0.101, 0.112 and 0.086 respectively. The results are also consistent with those reported in prior studies. It is noted that the adjusted R^2 for negative discretionary accruals sub sample is slightly higher than that for full sample and positive discretionary accruals sample. This result could be attributable to that earnings contains more timely bad news information in negative discretionary accruals sub sample firms, resulting in a higher adjusted R^2 . It is in line with Basu (1997)' prediction of higher adjusted R^2 for bad news firms.

Table 4 Results from combined regression model

Regression model:								
$X_{it} / P_{it-1} = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 DR_{it} * R_{it} + \alpha_2 S_{it} + \alpha_3 DR_{it} * S_{it} + \beta_2 R_{it} * S_{it} + \beta_3 DR_{it} * R_{it} * S_{it}$								
Full sample-150,323 observations								
α_0	α_1	β_0	β_1	α_2	α_3	β_2	β_3	Adj R^2
0.079*** (61.39)	-0.011*** (-5.03)	0.011*** (5.49)	0.197*** (36.65)	-0.038*** (-19.92)	-0.016*** (-4.80)	-0.006*** (-2.30)	0.117*** (15.70)	0.127

Note: S is a dummy variable, set equal 1 if the sign of discretionary accruals of the sample firm is negative, set equal 0 otherwise.

***indicates statistical significance at the 1% level (two tailed)

Table 4 presents the regression results for the combined regression model in which dummy variable S_{it} is incorporated. In the combined regression model, β_3 captures the difference of earnings' response to bad news between the sample firms with negative discretionary accruals and the sample firms with positive discretionary accruals. Consistent with the predicted signs, we can see from Table 4, β_3 gets the positive value of 0.117, β_2 gets the negative value of -0.006. They both are significant at the level of 1%. The earnings response to bad news approximately one and a half times ($1.6 = [0.197 + 0.117] / 0.197$) as much strongly for the

income-decreasing sub sample firms than for the income-increasing sub sample firms. β_2 captures the difference of earnings' response to good news between the sample firms with negative discretionary accruals and the sample firms with positive discretionary accruals. The sensitivity of earnings' response to good news for income-decreasing sub sample firms is only less than half times ($0.5=[0.011-0.006]/0.011$) that for income-increasing sub sample firms. The results derived from this combined regression model imply that the firms which engage in income-decreasing earnings management are more conservative than the firms which engage in income-increasing earnings management.

In sum, I partition the full sample firms into negative discretionary accruals sub sample firms and positive discretionary accruals sub sample firms and test the degree of firms' earnings conservatism for the three cases. The empirical results show: (1) In Basu's regression model, the negative discretionary accruals sub sample obtains the higher incremental coefficient on bad news (β_1) than the full sample does, while the negative discretionary accruals sub sample obtains the lower incremental coefficient on bad news than the full sample does. (2) In the combined regression model, the estimated coefficient β_3 , which captures the incremental earnings' response to bad news for negative discretionary accruals sub sample firms, is significantly positive. The results therefore are in line with my predictions and support my hypotheses.

7 CONCLUSION

Financial reporting supplies relevant financial information to investors to help them make investment decisions and also provides accounting measures for management performance evaluation purpose. However, the separation of control and ownership and information asymmetry generates the conflicts between managers and outside investors. Managers have obvious advantage of firms' inside information over

outside investors and other stakeholders. Accounting conservatism arises primarily to serve external parties such as investors, debtholders and standard or regulation setters to better govern or monitor firms' business operations. It protects investors and other stakeholders' interests by avoiding firms reporting overstated earnings, which may mislead investors or other stakeholders. One dimension of accounting conservatism is conditional accounting conservatism. It requires firms to recognize bad news in earnings more timely than good news.

Managers are motivated to engage in earnings management mainly for three typical incentives, which are capital market incentive, contracting incentive and political incentive. They may manipulate earnings upwards as to increase firms' share price or to avoid violate debt covenants, or to maximize their bonuses which are tied to earnings. on the other hand, they may manage earnings downwards as to mitigate political cost. Accruals act as an effective and pervasive vehicle for managers to practice earnings management. Specially, discretionary accruals is utilized for managing earnings because this component of accruals is more flexible to exercise by managers and is also difficult to detect by investors and other outside financial information users. Through accruals, managers can manipulate current earnings upwards by accelerating recognition in current earnings or manipulate earnings downwards by deferring earnings from current accounting period to future accounting period.

This study intend to explore the relation between conditional conservatism and earnings management and empirically examine the impact earnings management has on conditional conservatism (earnings conservatism). I hypothesize that income-decreasing earnings management biases the degree of earnings conservatism upwards, while the income-increasing earnings management biases the degree of earnings conservatism downwards. I based my hypotheses on the argument that managers are more likely to accelerate the recognition of bad news in earnings than good news when they conduct income-decreasing earning management, however,

they are more likely to defer the recognition of bad news but speed up the recognition of good news when they conduct income-increasing earnings management. The more tendency to recognize in bad news would bias the degree of firms' earnings conservatism upwards while the more tendency to recognize in good news would bias the degree of firms' earnings conservatism downwards. This argument lead to my prediction that the incremental coefficient on bad news (β_1) in Basu (1997) earnings regression model is higher for income-decreasing sub-sample firms than that for full sample firms and that the incremental coefficient on bad news for income-increasing sub-sample firms is lower than that for full sample firms.

To measure earnings management, I use negative discretionary accruals to proxy for income-decreasing earnings management and positive discretionary accruals to proxy for income-increasing earnings management. Jones (1991) accruals model is applied to estimate sample firms' discretionary accruals. I partition the full sample firms into two sub-samples according to the sign of firms' discretionary accruals. The firms with negative discretionary accruals are categorized into an income-decreasing earnings management sub-sample, the firms with positive discretionary accruals fall into an income-increasing earnings management sub-sample. To examine the degree of firms' earnings conservatism, I run Basu (1997) earnings regression model on full sample firms and each sub-sample firms respectively to get estimated incremental bad news effect, which is captured by coefficient β_1 . Then I compare the degree of earnings conservatism of each sub-sample firms with that of full sample firms to draw a conclusion. In line with my prediction, the empirical result shows that the negative discretionary accruals sub sample gets a higher incremental coefficient on bad news (β_1) than the full sample does and the positive discretionary accruals sub sample gets a lower incremental coefficient on bad news than the full sample.

In addition, I also argue that the firms which engage in income-decreasing earnings management tend to be more conservative than the firms which engage in

income-increasing earnings management. To examine whether the degree of earnings conservatism is significantly different between the income-decreasing sub sample firms and the income-increasing sub sample firms, I incorporate dummy variable, S_{it} , which differentiates two sub samples, into Basu (1997) regression model, and then run the combined regression model to get the estimated coefficient β_3 , which captures the incremental earnings' response to bad news for income-decreasing sub sample firms. Consistent with my prediction, the regression results show that β_3 is significantly positive, which indicates that the degree of earnings conservatism is significantly greater for the income-decreasing sub sample firms than for the income-increasing sub sample firms.

Based on the results, I draw the conclusion that firms' earnings management practice actually biases earnings conservatism and that the firms which engage in income-decreasing earnings management are more conservative than the firms which engage in income-increasing earnings management. However, the conclusion of this study should be considered cautiously because the methodology I apply in the empirical examination might bias the reality. On the one hand, the accrual model which I use to estimate the discretionary accruals is Jones model. Since it is just an estimation model, it is possible to generate biased estimated results and therefore affect the outcome of partitioning the full sample into two sub samples according to the sign of firms' discretionary accruals. On the other hand, I use the incremental bad news effect in Basu (1997) regression model to measure the degree of conditional conservatism. As a matter of fact, it would be hard to measure conditional conservatism accurately since in reality many factors may affect conditional accounting conservatism, for instance, the quality of accounting standards, the degree of unconditional conservatism etc.

REFERENCE

- Abarbanell J & Lehavy R (2003) Can stock recommendations predict earnings management and analysts' earnings forecast errors? *Journal of Accounting Research* 41(1): 1-31.
- Ahmed AS, Billings B, Harris MS & Morton RM (2001) Accounting conservatism and cost of debt: An empirical test of efficient contracting. *The Accounting Review*, 77.
- Ball R, Kothari S & Robin A (2000) The effect of international institutional factors on properties of accounting earnings. *J Account Econ* 29(1): 1-51.
- Basu S (1997) The conservatism principle and the asymmetric timeliness of earnings. *J Account Econ* 24(1): 3-37.
- Basu S (2005) Discussion of "Conditional and Unconditional Conservatism: Concepts and Modeling". *Rev Acct Stud* 10(2): 311-321.
- Beaver WH & Ryan SG (2000). Biases and lags in book value and their effects on the ability of the book-to-market ratio to predict book return on equity. *Journal of Accounting Research* 38(1): 127-148.
- Beaver WH & Ryan SG (2005). Conditional and unconditional conservatism: concepts and modeling. *Rev Acct Stud* 10(2): 269-309.
- Bliss, J.H. (1924). *Management through accounts*. The Ronald Press Co., New York.
- Bruns, W. J. and K. A. Merchant. (1990). The dangerous morality of managing earnings. *Management Accounting* (August), 22-25.
- Burgstahler, D. and M. Eames.(1998). *Management of Earnings and Analyst Forecasts*. Working paper, University of Washington.

- Bushee BJ (1998) The influence of institutional investors on myopic R&D investment behavior. *Accounting Review* : 305-333.
- Cahan SF (1992) The effect of antitrust investigations on discretionary accruals: A refined test of the political-cost hypothesis. *Accounting Review* : 77-95.
- Chandra U, Wasley C & Waymire G (2004) Income conservatism in the US technology sector.
- Chen Q, Hemmer T & Zhang Y (2007) On the relation between conservatism in accounting standards and incentives for earnings management. *Journal of Accounting Research* 45(3): 541-565.
- Clarkson PM, Dontoh A, Richardson G & Sefcik SE (1992) The voluntary inclusion of earnings forecasts in IPO prospectuses*. *Contemporary Accounting Research* 8(2): 601-616.
- Committee on Accounting Procedures (CAP). (1939). *Accounting Research Bulletin No. 2*, Unamortized discount and redemption premium on bonds refunded. American Institute of Certified Public Accountants (AICPA).
- DeAngelo H, DeAngelo L & Skinner DJ (1994) Accounting choice in troubled companies. *J Account Econ* 17(1-2): 113-143.
- DeAngelo LE (1986) Accounting numbers as market valuation substitutes: A study of management buyouts of public stockholders. *Accounting Review* : 400-420.
- Dechow P & Skinner D (2000) Earnings management: Reconciling the views of accounting academics, practitioners, and regulators.
- Dechow PM & Sloan RG (1991) Executive incentives and the horizon problem:: An empirical investigation. *J Account Econ* 14(1): 51-89.
- Dechow PM, Sloan RG & Sweeney AP (1995) Detecting earnings management. *Accounting Review* : 193-225.

- DeFond ML & Jiambalvo J (1994) Debt covenant violation and manipulation of accruals. *J Account Econ* 17(1-2): 145-176.
- Dye RA (1988) Earnings management in an overlapping generations model. *Journal of Accounting research* 26(2): 195-235.
- Erickson M & Wang S (1999) Earnings management by acquiring firms in stock for stock mergers. *J Account Econ* 27(2): 149-176.
- Feltham GA & Ohlson JA (1995) Valuation and Clean Surplus Accounting for Operating and Financial Activities*. *Contemporary accounting research* 11(2): 689-731.
- Feltham GA & Ohlson JA (1996) Uncertainty resolution and the theory of depreciation measurement. *Journal of Accounting Research* 34(2): 209-234.
- Fields TD, Lys TZ & Vincent L (2001) Empirical research on accounting choice. *J Account Econ* 31(1): 255-307.
- Financial Accounting Standards Board (FASB), 1980. Statement of Financial Accounting Concepts No. 2, Qualitative characteristics of accounting information, Norwalk, CT.
- García Lara JM, García Osma B & Mora A (2005) The effect of earnings management on the asymmetric timeliness of earnings. *Journal of Business Finance & Accounting* 32(3 - 4): 691-726.
- Gassen J, Fülbier RU & Sellhorn T (2006) International differences in conditional conservatism—the role of unconditional conservatism and income smoothing. *European Accounting Review* 15(4): 527-564.
- Gilman, S. (1939). *Accounting Concepts of Profit*. New York, N.Y.: The Ronald Press Company.

- Givoly D & Hayn C (2000) The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative? *J Account Econ* 29(3): 287-320.
- Graham JR, Harvey CR & Rajgopal S (2005) The economic implications of corporate financial reporting. *J Account Econ* 40(1): 3-73.
- Guay WR, Kothari S & Watts RL (1996) A market-based evaluation of discretionary accrual models. *Journal of accounting research* 34: 83-105.
- Hanna, J.D. (2002). Conservatism and accounting measurement. Working paper, University of Chicago.
- Healy P & Wahlen J (1998) A review of the earnings management literature and its implications for standard setting.
- Healy PM (1985) The effect of bonus schemes on accounting decisions. *J Account Econ* 7(1-3): 85-107.
- Healy PM & Palepu KG (1990) Effectiveness of accounting-based dividend covenants. *J Account Econ* 12(1-3): 97-123.
- Heltzer W (2009) Conservatism and book-tax differences. *Journal of Accounting, Auditing & Finance* 24(3): 469-504.
- Holthausen RW (1981) Evidence on the effect of bond covenants and management compensation contracts on the choice of accounting techniques: The case of the depreciation switch-back. *J Account Econ* 3(1): 73-109.
- Holthausen RW & Watts RL (2001) The relevance of the value-relevance literature for financial accounting standard setting. *J Account Econ* 31(1): 3-75.
- Hughes PJ (1986) Signalling by direct disclosure under asymmetric information. *J Account Econ* 8(2): 119-142.

- International Accounting Standards Board (IASB). (1989). Framework for the Preparation and Presentation of Financial Statements, International Accounting Standards Committee Foundation, London.
- Jones JJ (1991) Earnings management during import relief investigations. *Journal of accounting research* 29(2): 193-228.
- Key KG (1997) Political cost incentives for earnings management in the cable television industry. *J Account Econ* 23(3): 309-337.
- Kim B & Jung K (2007) The influence of tax costs on accounting conservatism. The influence of tax costs on accounting conservatism .
- Kothari, S.P., Leone, A.J., Wasley, C.E. (2001). Performance matched discretionary accruals. Working Paper, Sloan School of Management, Massachusetts Institute of Technology.
- Kothari S (2001) Capital markets research in accounting. *J Account Econ* 31(1): 105-231.
- National Association of Certified Fraud Examiners. (1993). What every accountant should know about fraud. NASBA, New York.
- Pae J (2007) Unexpected accruals and conditional accounting conservatism. *Journal of Business Finance & Accounting* 34(5 - 6): 681-704.
- Penman, S. H. (2004). Financial statement analysis and security valuation. 2nd edition. New York, NY: McGraw-Hill.
- Perry SE & Williams TH (1994) Earnings management preceding management buyout offers. *J Account Econ* 18(2): 157-179.
- Pope PF & Walker M (1999) International differences in the timeliness, conservatism, and classification of earnings. *Journal of Accounting Research* 37: 53-87.

Pope PF & Walker M (2003) Ex-ante and ex-post accounting conservatism, asset recognition and asymmetric earnings timeliness. Lancaster University and The University of Manchester.

Richardson G & Tinaikar S (2004) Accounting based valuation models: what have we learned? *Accounting & Finance* 44(2): 223-255.

Roychowdhury S (2006) Earnings management through real activities manipulation. *J Account Econ* 42(3): 335-370.

Roychowdhury S & Watts RL (2007) Asymmetric timeliness of earnings, market-to-book and conservatism in financial reporting. *J Account Econ* 44(1-2): 2-31.

Schipper K.(1989). Commentary on Earnings Management, *Accounting Horizons* December 1989 , 91-102.

Scott, WR. (2003). *Financial accounting theory*. 3rd edition. Toronto: Ontario Prentice Hall

Shackelford DA & Shevlin T (2001) Empirical tax research in accounting. *J Account Econ* 31(1): 321-387.

Sloan RG (1996) Do stock prices fully reflect information in accruals and cash flows about future earnings? *Accounting Review* : 289-315.

Smith, C.J. (1979). Applications of options pricing analysis. In: Bicksler, J.L. (Ed.), *Handbook of Financial Economics*. North-Holland, Amsterdam, 79-121.

Subramanyam K (1996) The pricing of discretionary accruals. *J Account Econ* 22(1): 249-281.

Sweeney AP (1994) Debt-covenant violations and managers' accounting responses. *J Account Econ* 17(3): 281-308.

Teoh SH, Welch I & Wong TJ (1998) Earnings management and the long - run market performance of initial public offerings. *The Journal of Finance* 53(6): 1935-1974.

- Walker RG (1992) The SEC's ban on upward asset revaluations and the disclosure of current values. *Abacus* 28(1): 3-35.
- Watts R (2003) Conservatism in accounting-part II: evidence and research opportunities. Simon Business School Working Paper No.FR 03-25 .
- Watts, R.L., and J.L. Zimmerman. (1986). *Positive Accounting Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Watts RL (1977) Corporate financial statements, a product of the market and political processes. *Australian Journal of Management* 2(1): 53-75.
- Watts RL (1993) A proposal for research on conservatism. Unpublished working paper, University of Rochester (Presented at the AAA meetings, San Francisco, CA).
- Xie H (2001) The mispricing of abnormal accruals. *Accounting Review* : 357-373.
- Zhou J & Lobo GJ (2006) Did conservatism in financial reporting increase after the Sarbanes-Oxley Act? Initial evidence. *Accounting Horizons* 20(1): 57-73.